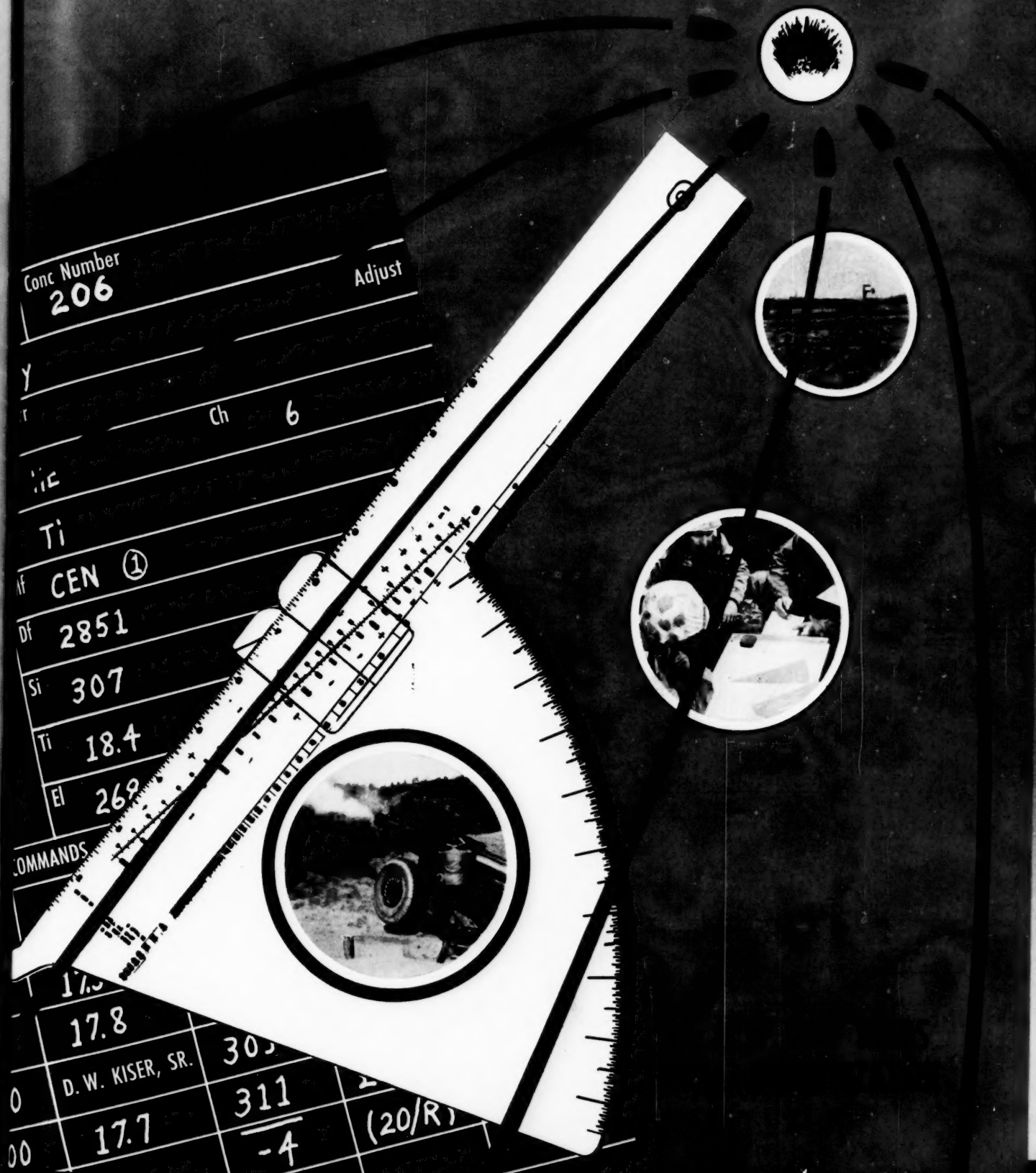


# Marine Corps Gazette

APRIL 1955

THIRTY CENTS



# Marine Corps Gazette

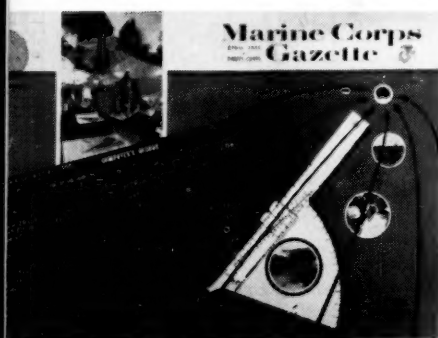
APRIL 1955

NUMBER 4

VOLUME 39

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## COVER

It's been some time since we've given the cannon cockers anything to mull over, but this time we've gone right to the heart of the system to present *FDC Needs Modernization*, (page 12). One of the newer tools of the trade, the Rizza fan, seemed to present itself as a central point for the modernization program, so TSgt Delroy Kiser designed the cover around it. It's dedicated to all you artillerymen from shot plotter to lanyard lugger.

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# message center

## Fortner's Folly?

...Wherein lies the logic of the article *The Little Picture*?

To argue from the *big picture*, to boredom, to lack of readiness in the Marine Corps is analogous to a syllogism with an undistributed something or other.

What exactly is SSgt Fortner saying? That some units do not have competent instructors? That training aids are not always available? That one 2dLt followed the technique of instructions manual?

Agreed. Severally, these things do occur in some units. But, I ask these questions. Has the S-3 ceased to require training estimates and proposed training schedules from company commanders? Have company commanders ceased to go over the training needs of the individual platoons with the platoon commanders? Is the General's staff the only echelon concerned with an effective training program? Have NCOs lost the initiative to improvise? Are all the men in the Corps bored? Is the Corps in a state of unpreparedness?

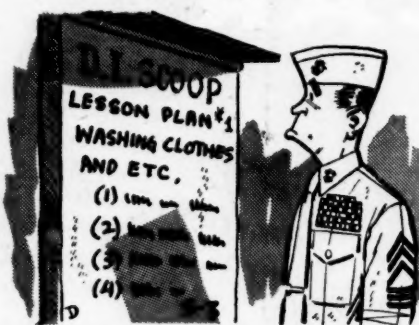
Finally, \$500.00 for what?

CAPT MAX McQUOWN  
Youngstown, Ohio

## Fortner Fortified!

...I must say that this letter was prompted by Sgt Fortner's *The Little Picture* in your February Edition. I have been an S-3 assistant at Parris Island for the past year and a half, and SSgt Fortner might be surprised to know that I am in complete agreement with him, not only on his views of the S-3 but his entire concept of *The Little Picture*. Although Sgt Fortner writes of the S-3 in general, I believe that his words of wisdom apply here at Parris Island more than any other place in the Marine Corps. Let me put it this way. The DI is selected because he meets a rather high qualification in GCT, time in grade, proficiency, conduct, military bearing and maturity, then is sent to 4 weeks of Drill Instructors' school and screened by

the local psychiatrist. At the end of all this he is assigned to a recruit platoon and reduced to a moron, not capable of thinking or acting on his own. He is given the responsibility, under close supervision, of teaching such complicated subjects as the Pack and Infantry Drill, but all other subjects, including the highly technical Hand Salute, must



be taught by a Special Subjects Instructor. Every hour of his day is scheduled by the S-3, and to rub it in, every hour is covered by a Lesson Plan with detailed instructions as to exactly what to do, leaving nothing for the DI's abilities, imagination or initiative. He has a Lesson Plan for washing clothes which starts out like this. "First take all your dirty clothes, empty the pockets, fill your bucket with water and soap and add your dirty clothes." Our orders are just as bad. We put out a parade order and outline almost every move the man makes and go into detail as to what equipment he will carry. We say "Canteen, cup with cover; first aid packet w/ pouch" as if we would expect the DI to bring his troops out with canteens dangling by their chains unless we specified covers. The DI can't bring his troops in out of the rain until the S-3 puts out the word that it is officially raining. We have taken everything away from the DI, his initiative, his self respect and his will to do a good job. The 3 Section would do well to concern itself with the overall planning and supervision of training and leave the details of where, when and how to the DI who

is perfectly capable of looking after the Small Picture.

My congratulations to Sgt Fortner on a job well done.

TSgt P. W. LAMBERT  
Parris Island

...I agree that the company commander has the primary responsibility for training his own company and I am positive that in *all* good battalions and regiments this is the true picture. But, he can't do it without the advice and co-ordination of the S-3. Agreed, that we all learn much more by demonstration and application than just listening and seeing. This requires the maximum utilization of all training areas and ranges. Facilities at most Marine bases are limited. Needless to say, someone has to perform the duties of co-ordinating the use of training facilities. This is one important function of the S-3s.

I agree again with Fortner when he says that the key men who are so vital to the vast machinery that makes the Marine Corps tick are the instructors. I prefer to call them leaders, because how can a Marine become a good leader without being a good teacher? All officers and NCOs spend most of their time in the Marine Corps teaching; by example, by giving formal periods of instruction, by supervision, by co-ordination. Omit actual combat and it may be safe to say that 90 per cent of the time is spent in teaching. Developing leadership is not a one way street. The command responsibility is there, but the much greater responsibility rests on every Marine's shoulder who must take the bull by the horns and fulfill the requirements and responsibilities of a leader. This is so important that it was made the subject of a recent CMC letter.

CAPT N. CAPPELETTO  
Denver, Colo.

## Bulganin Watched

...Current developments in the USSR recall to mind an excellent article published in the August issue of the GAZETTE.

The article—*Watch Bulganin*—should prove of profound interest to all contemporaries. I should presume that the article was another GAZETTE first-of-its-kind.

MAJ C. E. WALKER  
Twentynine Palms, Calif.

# ON THE JOB . . . — not "on the way"

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...After reading the article *Watch Bulganin* in August 1954 issue, I stated that Bulganin would rule Russia within a year. Everyone opposed me on it, so I settled for . . . bets which totaled \$634.00. Well, now I am ready to collect, thanks to GAZETTE for publishing this article.

PAUL G. MARTIN

Kew Gardens, N. Y.

#### Four to the Bar

...An item in January 1955 *In Brief* concerns the wearing of more than 8 ribbons and the encouragement to wear them in rows of 4 with each succeeding row reduced in number to prevent concealment of any ribbon by the uniform lapel.

However, my comment is that many Marines would gladly conform to the reference given but cannot do so because the metal bar required cannot be purchased in the Post Exchanges.

It is therefore recommended that the metal bar necessary to hold 4 ribbons be made an item to be stocked by the Post Exchanges in lieu of some of the present useless

baubles now stocked.

CAPT W. G. CARTER  
c/o FPO, San Francisco, Calif.

ED: *The problem can easily be resolved by a good PX officer; they are available from manufacturers.*

...A persistent threat to the sanity of all Leathernecks is that tiny, but monumentally inefficient twidget—the award ribbon fastener. You can purchase a handful, manfully winnow out those you suspect have promise, and end up presenting yourself to a gimlet-eyed "old man" with one or more of the rows dangling like a multi-colored cat's tail.

Is some mufti manufacturer waging a tiny cold war on our good humor, or are penny purchases at the PX so piddling that it's laughable to expect a fair guarantee of workability?

MSGT FRANCIS J. O'NEIL  
Havelock, N. C.

#### Alexander: 355-323 BC

...In regard to the letter of Captain G. Rule, February 1955 issue, it would appear that he has sold short the first of the Great Captains,

Alexander the Great, by about 11 years of fruitful military leadership and endeavor.

In correction, Alexander of Macedonia was born in 355 BC and died of malaria on the 13 June 323 BC while in the 33rd year of his life, the 12th year of his reign. Significant also is the fact that the first of the great decisive battles of history, Arbela, was fought by Alexander in 331 BC when he was 24 years young.

CAPT SAMUEL L. EDDY, JR.  
Berkeley 4, Calif.

#### Enthusiasm

...*Stand Up And Talk*, by Capt G. E. Shepherd presents a format for the instructor to follow. It is sound, practical, and since it is the one taught by the Instructors Orientation Course at the Marine Corps Schools it is also a tried and proven solution.

I do, however, take exception to one point—they will soon be calling you a good speaker. Do we want good speakers? NO! Toastmasters may, but we want good teachers. A man may be a fine speaker, but a poor instructor. On the other hand one can be an excellent instructor and still not win any laurels at Toastmasters' club meetings.

To follow the format laid down by Capt Shepherd is only 49 per cent of the fight. A good speaker could apply the mechanics of preparation, rehearsal and presentation with finesse, yet it would be just that—mechanical. That is if the most important ingredient of teaching is not added—*enthusiasm for the subject*.

We can solve the problem by having a special form both in the qualification jacket or service record book and on file with the cognizant detail section which indicates the special aptitude of the individual.

Certainly experience and formal schooling will accomplish much.

Yet, there are those who will never be good teachers. Do we throw them out of the Corps, or perhaps only pass them over? Of course not. Most of them are fine leaders. The only solution is to accept the fact that some can't teach effectively and to mark them accordingly. We must at the same time attach no stigma to this. . . Most can teach—a few can't. As long as the latter are quali-

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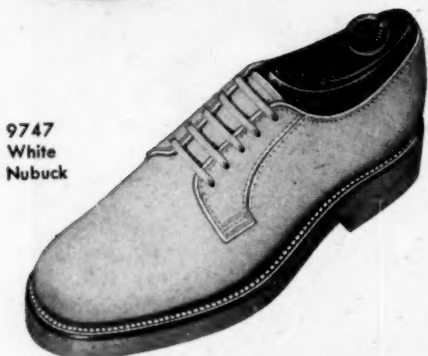




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fied in all other respects they should not be penalized.

Looking at the little picture and standing up and speaking isn't enough. We have to have enthusiasm in our teaching. For when the sharply dressed man in green steps out in front of students he becomes a salesman and unless the students feel this vitality . . . . . NO SALE.

CAPT. W. M. TATUM  
Quantico, Va.

#### Basic Facts

... Regarding your *In Brief* article telling us of the elimination of duplication in training between Paris Island and Camp Lejeune, you completely forget the same elimination is being effected between San Diego and Camp Pendleton. Remember, please, there are two boot camps, each executing a syllabus prescribed by the Commandant.

The new syllabus was quite happily received by those of us engaged in the *nuts and bolts* of recruit training, as a great stride in the right direction, to return recruit training to its historically basic function—the physical processing of the civilian product into a basic Marine.

The main objective of recruit training is the production of a man who looks, acts, talks, dresses, walks and *thinks* like a Marine. The latter is the catalyst determining and governing all the former. It has its genesis in the physical process. Accordingly, the mental condition is directly proportional to the physical conditioning and each is then dependent on the other, ad infinitum. "Squads Right" drill amply illustrates the interdependence of the physical and mental.

To further promote the mental and physical, in a *spirited* way, we need more time on the bayonet and obstacle courses, yes, even in this, the nuclear age. Who can possibly and properly predict the abolition of the man with the rifle? The well-placed .30 caliber bullet and the bayonet tip will do more than a hundred roentgens can to put an enemy out of action. And the Geiger-Counter boys are going to need some close-in protection, too.

Once again, gentlemen, boot camp is basic, very basic. Do not expect the finished and polished

product; the field does that. Ours is a physical process designed to generate the all-important and critical mental process. This is not a finishing school.

MAJ MARSHALL SALVAGGIO  
San Diego, Calif.

#### Make Mine Line

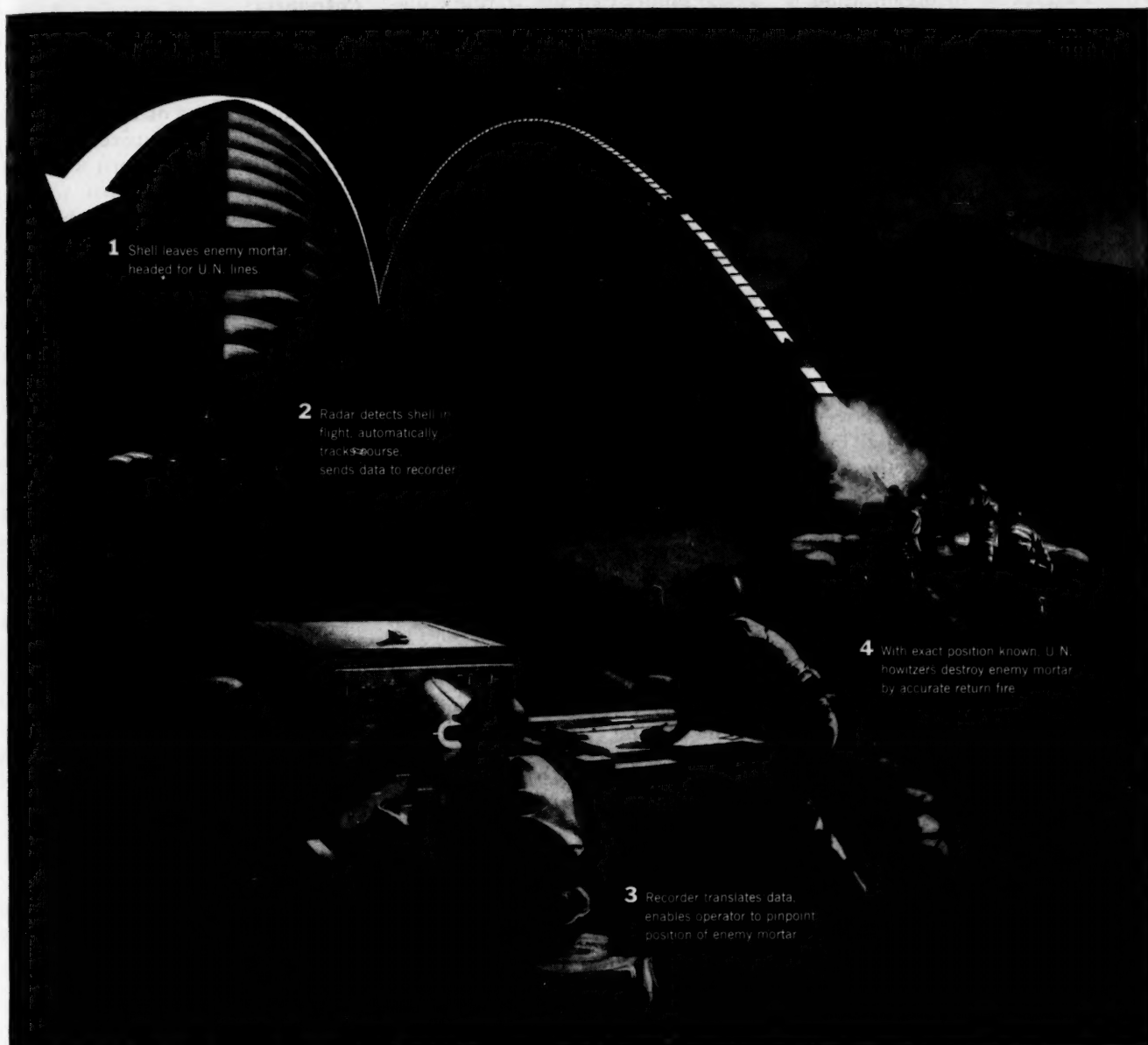
... Re MSgt Minahan's letter in the January issue of the *GAZETTE* and the current rumblings and controversy in regards to the announced forthcoming policy of creating Sergeants Major and First Sergeants from HQMC.

HQMC has said that this was in line with the efforts to bring back some of the prestige that was formerly associated with those billets. I believe that we can go considerably further into the subject and some of the *why's*.

The Marine Corps has traditionally and I might add, practically, picked its leaders from the *line*. At one time in the Corps, in the not too distant past, every Marine was a Marine in the strictest sense of the word. I mean by that, that his professional background and training was such that he could and did perform most any task that confronted him. Alas, today we cannot truthfully say that. The present day Marine Corps has become a very complex machine, shot through with specialization, considerably different from the pre-WWII Corps. Although it is still said that every Marine is primarily a fighting man and a specialist second, I for one, cannot buy that. I have seen too many things that make me believe the contrary. The specialist in the Corps today, whether he is administrative, supply, disbursing, or what have you, is so far from the *troops* that he does not encounter the day to day problems of military leadership and their practical solutions. Military leadership, in my estimation, is born and reared by close association with the *troops*. The term *close association* is not in any sense to mean palsy-walsy, calling each other by our Christian names, etc., but the fact that we recognize and are aware that our men are not merely names and serial numbers but are living, human beings who have certain abilities, feelings, and limitations.

To me, the Sergeant Major or





# ENEMIES' MORTARS LOCATED BY RADAR

Army Used Device Against Reds in Korea, NY TIMES, DEC. 12, 1954

## THE STORY BEHIND THE STORY:

- "Hundreds of soldiers now returned safely from Korea literally owe their lives to the extreme accuracy and speed of the new counter-mortar system." This good news was revealed by the Signal Corps in December when the public first learned of the existence of the MPQ-10 Mortar Locator, one of the Army's best kept secrets.
- How could a carefully concealed enemy mortar be located and destroyed

after just one or two shells had been fired? And how could such devastating accuracy be repeated over and over again—no matter how often the enemy relocated his mortars? These were important questions in Korea.

■ Actually, the uncanny efficiency of the MPQ-10 Mortar Locator was due to the joint efforts of the Army Signal Corps and Sperry engineers. Working together, they developed a new portable radar system for use at the front lines. How does it work? An automatic radar tracker detects and "locks on" the path

of enemy mortar shells. In effect, it traces each shell back through its trajectory and reveals the enemy position. This information is then relayed to an artillery fire direction center which directs a return barrage against the enemy mortar in a matter of minutes.

■ Delivering this Mortar Locator to the troops is another example of Sperry engineering and production solving a problem to meet a critical need. Today, in the air, at sea, as well as on land, Sperry is helping extend our nation's capabilities with instruments, controls and systems for all branches of the military as well as for important segments of industry.

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DIVISION OF THE SPERRY CORPORATION • GREAT NECK, N. Y.

First Sergeant of an organization is not and should not be merely the administrative chief of that unit, and we must admit, that is what we find in 90 per cent of the Marine Corps today. He is the liaison between Commanding Officer and the enlisted men under his command. To be an effective liaison, you must first understand the *whys* and *wherefores* of what you represent. It is entirely possible, and does happen, in the present day Marine Corps, for a man to come into the Corps and to advance to the highest enlisted rank, never having set foot out of his specialization, save recruit training. Is there a parallel in the commissioned leaders of the Corps? Definitely not. The average unrestricted line officer of the Corps with 10 or more years of service has had the opportunity for a well rounded exposure to all facets of his profession. Should there be any difference with our enlisted leaders? Does the enlisted Marine, who is living and working in his own narrow channel of specialization, possess the leadership abilities, knowledge and professional background of the profes-

sional soldier that the Marine epitomizes? I say *no*, there being exceptions of course.

I believe, in summing up, that the Marine Corps is striving to return



the position of Sergeant Major and First Sergeant back to the status that it was at one time, a coveted and respected position of prestige, dignity and privilege that is reserved for those Marines who have best demonstrated that they possess the necessary professional abilities and leadership qualities commensurate to the real professional Marine. Mere proficiency in a specialization that aids, only in a small measure, the accomplishment of the mission of the Marine Corps is not enough.

MSGT PATRICK R. BREWER  
c/o FPO, San Francisco

## Potpourri

... Recently an order "Uniform Regulations" was published in this organization and stated as follows: "Only those items of uniform clothing that are not exclusively military in character may be worn with civilian clothing i.e., raincoat without chevrons, shirts without chevrons, footwear, socks, gloves, drawers and undershirts." The above mentioned order is in accordance with MCM Chap 49003-Par 2a (change 6).

MCM Chap 49157 Par 1 (change 5) clearly states that chevrons will be worn on raincoats and shirts among other items of outside uniform.

Taking into serious consideration both refs listed above—then only privates are entitled to wear such a mixture of the uniform and civilian clothing.

My point is, why should a private be allowed to go on liberty in such a mixed form of dress, (undress), when it will only tend to lower the standards of a Marine on liberty? It is my opinion that such a mixture of the uniform and civilian clothing would greatly lower the opinion of the civilian toward the, always before, smartly dressed Marine.

Every Marine has sufficient uniforms for duty and liberty, so it should not be necessary for any Marine to wear such a mixture of clothing.

TSgt B. T. LEWELLING  
c/o FPO, San Francisco, Calif.

## Better System

... Congratulations to Major Steinkraus on his *Rotate the Squadron* in your January issue. I'm a ground pounder myself, but I strongly feel that his remarks about the improvement, under a unit rotation system, of unit esprit and readiness are applicable to any FMF organization.

Individual rotation is a curse which condemns lower echelon units to remain forever in a state of flux and poor individual training. No matter the number of large scale EXs and LEXs the outfit has made in the past year, the personnel changes during the same period leave it in no better shape than it was originally, in regard to experience, team-work and individual training.

As for esprit, I recently asked a master sergeant just returned from

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Alfred Bolognese will be at Camp Lejeune on 4-5 April—  
—Cherry Point 6-7 April—TTULant, Norfolk 8 April—

a tour with the 3d MarDiv how he liked the duty. He allowed that it had been all right, but that the first word put out on reaching Japan had announced the State-side rotation plan.

He asked, "Who wants to be with an outfit where everybody is figuring out how much time he has left to do with it?"

Without being very familiar with the personnel problems of the Marine Corps, I feel that our permanent 3-division structure bears the capability of being adapted to a training system based on a 3-year enlistment period and a 3-year required tour for reserve officers. Properly organized, it would mean that 1 division would always be trained to a peak, another would be halfway to the goal, and the third would be starting the training cycle. Overseas rotation would coincide with state of readiness. In any emergency, the influx of trained reservists would bring the undertrained units enough experience to fill the gaps in training.

There must be a better system than the one in use today.

1STLT D. C. MACMICHAEL  
Camp Lejeune, N. C.

### Relative Mobility

... The increased mobility provided for and assured by the *New Look for the Engineers*, in LtCol R. L. Smith's article (Dec '54) is somewhat subject to question. Of course, mobility being relative, it depends on how one views it. Compared to what we had in the past—there is no question. How this equipment fits into and meets present concepts and requirements—that is something else. The mobility of the division, or any element of the division requiring engineer support, would appear to be the essential criteria upon which to evaluate and determine the degree of mobility. A material increase in the amount of wheeled or tracked equipment within a unit does not necessarily enhance its mobility. Conversely, under today's concept of extreme mobility, added weight and bulk created by heavy, slow moving items of

equipment act to impede the speed with which a force can be moved.

Somewhat indicative of the present degree of speed and mobility of the division engineer battalion is

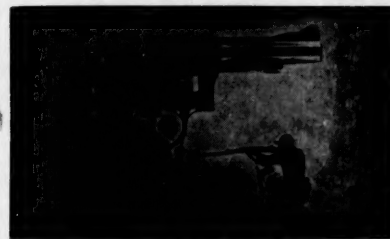


revealed by the requirement for 7 low-bed machinery trailers to move approximately 37 pieces of heavy crawler-type equipment. Not to be left out in this letter, the shore party battalion is in the same relative position of mobility—3 low-bed trailers to move 36 pieces of heavy equipment.

Undoubtedly, a new look is planned for and will be forthcoming shortly for divisional engineer and shore party units.

LTCOL LLOYD G. COUTTS  
c/o San Francisco, Calif.

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# our authors

☛ Top man in Marine Corps Association's essay contests in 1941 and 1944, **Col Robert Cushman, Jr** took 1st prize award again this year in Class I with his *Amphibious Warfare Tomorrow* (page 30). Col Cushman started his Marine Corps career (after being graduated from the Naval Academy in 1935) as a platoon leader for the 4th Marines on Soochow Creek in Shanghai, China. He was seagoing aboard the USS *Pennsylvania* when WWII broke, and later became CO of the 2d Bn 9th Marines, commanding them until 1945. He has earned the Navy Cross, the Legion of Merit and the Bronze Star. After the war he served as an instructor at Senior School, Quantico, Va. and as Head, Amphibious Warfare Branch of the Office of Naval Research. In 1949-51 he was with CIA and then went to the CINCNELM Staff where he was Amphibious Plans Officer. He is now



COL CUSHMAN

at Norfolk, Va., as Director of the Plans and Operations division of the Armed Forces Staff College.

☛ Before you assume that the author of *Blow Up Your Audience* had anarchist tendencies and was carried away with the program, let us hasten to assure you that article is nothing more than the tale of how a small outfit did a king-size job with a handful of men. **1stLt J. W. Kennon**, who wrote the piece because he had "a deep interest in the effectiveness of public demonstrations . . ." is ExO of the Marine Barracks at the Naval Air Rocket Test Station, Dover, N. J. — where the demonstration he describes took place. Commissioned from the Naval Academy in 1952, Lt Kennon has since graduated from the Basic School and served as a rifle platoon commander with the 5th Marines in Korea.

☛ **Maj M. I. Karim** (*Pakistan Army*, page 26), who belongs to the Eastern Wing of Pakistan, joined the Army in 1944 and was commissioned in the Armored Corps. His first regiment was the Central India Horse (Divisional Reconnaissance Regiment of the famous 4th Indian Division). He served with the regiment for a short while in Italy and then in Greece until February 1946. He "opted" for



MAJ KARIM

Pakistan and was transferred to the 19th Lancers (tanks) of the Pakistan Armored Corps. He was adjutant of his regiment until December 1949 when he was selected to be an instructor at the Tactical Wing, Armor. He left the Tactical Wing, Armor in February 1954 to assume his present appointment as Assistant Naval, Military and Air Attache to the US.

☛ Now Planning Officer of the Division of Information, HQMC, **LtCol Louis E. Hudgins, Jr**, cut his teeth as a second lieutenant at the battle of the Tenaru River in 1942. Some of the concrete examples he uses to drive home points in his *Ready for Fear?* on page 46 occurred during the period when he was serving with the 1st MarDiv on Guadal-



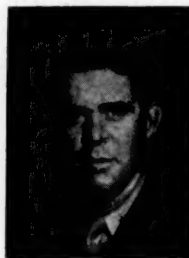
LTCOL HUDGINS

canal. A graduate of VMI ('39) LtCol Hudgins has completed both Junior and Senior courses at MCS, Quantico, and before going to his present duty he served in Japan and Korea on the staff of Amphibious Group I.

☛ Both **LtCol E. J. Rowse** and **Maj L. S. Bethards** who teamed up to do the *FDC Needs Modernization* (page 12) were serving in the 3d MarDiv together when they wrote the article and both are artillerymen of long experience. LtCol Rowse served at Guadalcanal, Tarawa, Saipan, Guam and Iwo Jima during WWII and since then has been in the per-

sonnel department of HQMC, an instructor in the Arty Section, MCS and a member of the PacFlt Evaluation Group. At the present time he is with FMF Pac. Major Bethards served with artillery units during WWII, went inactive in 1946, returned in 1950 to join the faculty of the Artillery School, Ft Sill and then went inactive again until November 1952 when he was integrated and went out to the 3d MarDiv. He served as assistant Artillery officer in the FSCC section there, and now works over a plotting board with the 2d MarDiv.

☛ **Major Phillip N. Pierce**, author of *Blueprint for Publication* (page 58) has been editor, author, radio script writer and Marine during his 38 years on this earth. Commissioned in 1942, he was with the 4th MarDiv and V Phib Corps overseas during WWII. Then in December 1945 he took over as OIC, Press Section of

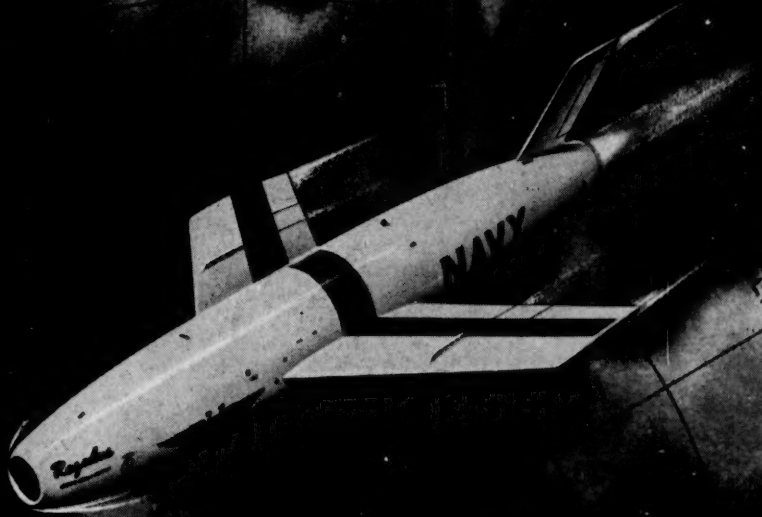


MAJ PIERCE

Div Pub Info at HQMC. He attended the Artillery School at Ft Sill in 1948 and went to Korea as S-3 of the 1st Bn, 11th Marines when the Brigade shipped out in '50. Upon his return he was CO of ADU at Quantico until he went to Coronado, Calif, as Chief Instructor of the Naval Gunfire School.

☛ Most of our readers are already acquainted with **Garrett Underhill** who concludes his study of *Red Armor* on page 18. Concurrently he states we may have difficulty comprehending the "armor-heavy" theory since we are not armor-supported-by-infantry oriented, but vice versa. But since the principles of armor shock power "a la Russe" are characterized by an initial overwhelming attack of infantry as well as the later exploitation in the "heavy" phase by the accompanying SUs, he sketches a typical attack combining both. These tactics had their genesis in Spain and include the effect of recoilless and shaped charge weapons, which were in action on the Eastern Front long before they were used by US troops.

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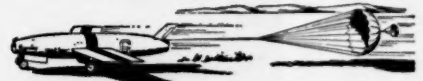
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# F D C NEEDS MODERNIZATION

**LtCol E. J. Rowse  
Major L. S. Bethards**

**Until a mechanical computer  
replaces personnel we must do what  
we can with what we have on hand**

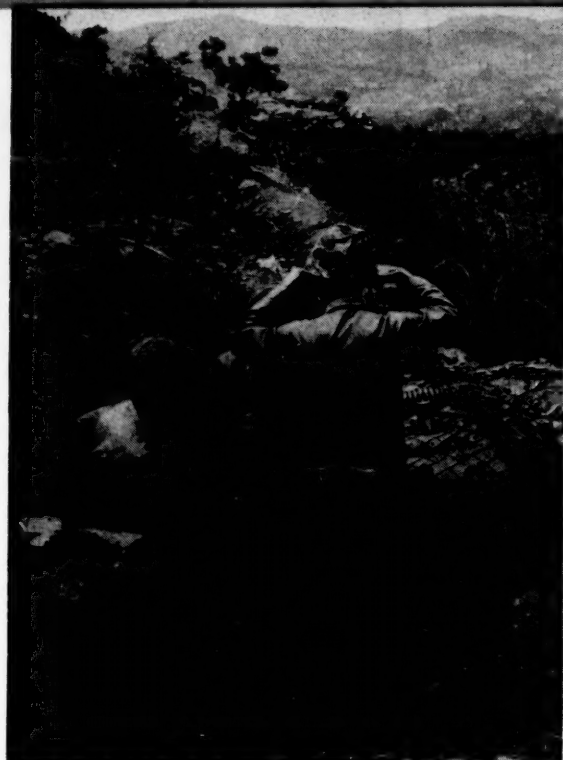
☛ TO MOST MARINES WITH A HASH-mark or two to their credit, the terms—Fire Mission—Direct Support Mission—Reinforcing Mission—are associated with the infantry's primary and major supporting arm—the artillery. The purpose of this article is to indicate ways and means of improving field artillery gunnery techniques and thus improving Marine artillery's ability to continuously render superior fire support to Marine infantry.

Before considering the manner in which artillery fire direction can be improved (which in turn will directly improve the fire support capabilities of the artillery), it is desirable that a definition of the term be established. *FM 6-40* states that—"Fire direction is the tactical and technical control of the fire power of one or more artillery units." The manual continues with a statement covering the objectives of fire direction—"Continuous and accurate fire support under all conditions of weather, visibility and terrain"—"Flexibility sufficient to engage all types of targets over a wide area"—"Prompt massing of fires of all available units in any area within range"—"Prompt distribution of fires



simultaneously on numerous targets within range."

For the purposes of this article, the technical aspects of fire direction consist essentially and simply of; first, plotting on a firing chart targets located by the various target locating agencies (forward observers, air observers, intelligence agencies, sound and flash range sections,



each battery. The computers determine, with the aid of graphical firing tables, the necessary firing data and send this data to the firing batteries.

During WW II, direct support artillery battalions employed the gunnery system basically indicated on p 14, lower. Generally, this system was simple, rapid, economical in manpower and equipment and (with well trained troops) was efficient and accurate.

But objection to the system was that conduct of fire employing precision procedures, in which all adjustments had to be estimated or computed with respect to the gun-target lines by the observer. This was difficult and time consuming to teach. This was particularly true and undesirable under the increased tempo of wartime mobilization. The system required exceptionally well-trained observers to efficiently execute all but forward observer-type missions. Conduct of fire employing forward observer methods was simple. It was also effective when employed on targets within 2,000 yards of the observer and it is estimated that approximately 90 per cent of the missions fired by FOs during WW II fell within this range. However, some observers developed the lazy habit of conducting all observed

counter-mortar radar sections, etc.); second, the computation of firing data — range (elevation), direction (deflection) and difference in altitude between the target and the guns (site); and third, the delivery of the firing data to the guns.

With the meaning of fire direction established, let us briefly consider its birth and subsequent development into the system now employed. During World War I, fire direction, as we know it today, did not exist. Most of the firing consisted of observed fires executed on the battery level or detailed planned fires delivered on exacting time schedules. The delivery of surprise or massed fires, common to modern warfare, was practically unknown. In the late 1930s, the technique of fire direction was born and, after years of experi-

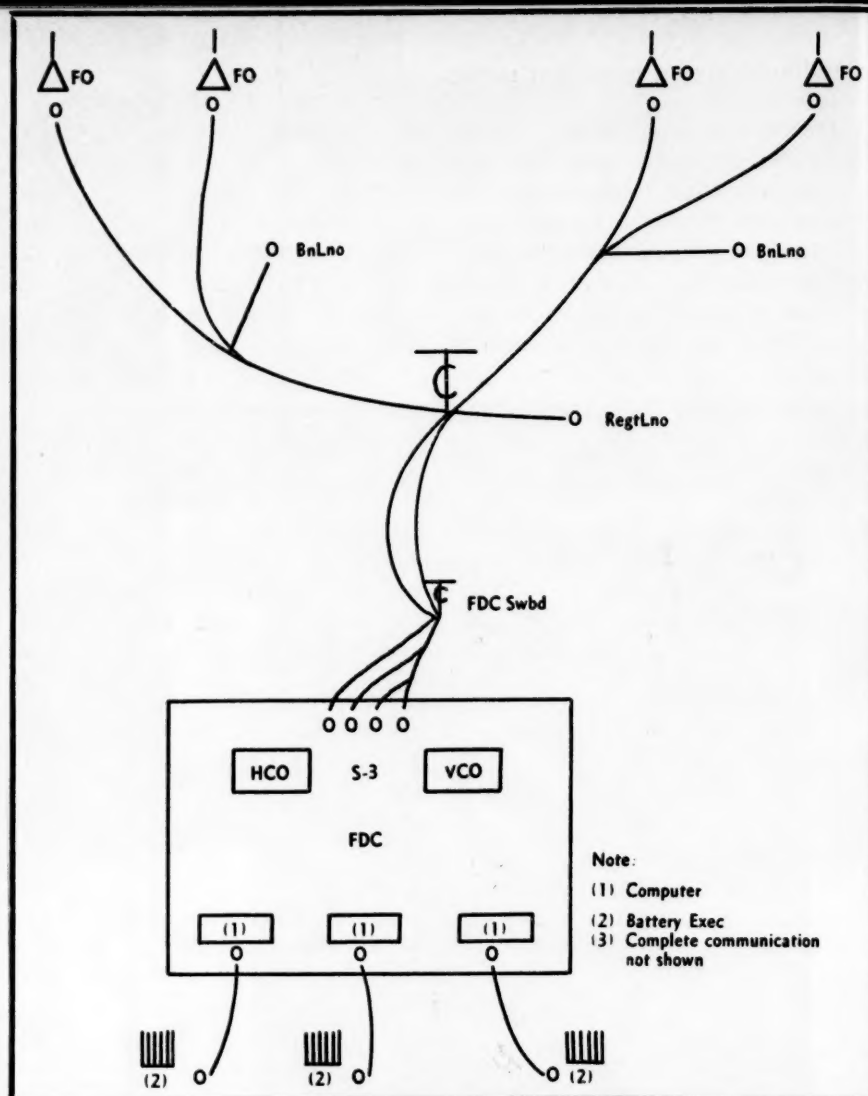
mentation and development by the Army, was adopted by the Marine Corps in 1941. The system utilized, with a great degree of success during World War II, is essentially the same employed today.

Artillery Fire Direction Centers (FDCs) both during WW II and in Korea were organized similarly. The S-3 is the Gunnery Officer of the artillery battalion and as such is responsible for the efficient operation of the FDC and the prompt delivery of fire support. The Horizontal Control Operator (HCO) plots targets on his firing chart and, with a range deflection fan, measures and then announces to the computers the range and deflection to the target for each battery. The Vertical Control Operator (VCO) plots the target and computes and announces the site for

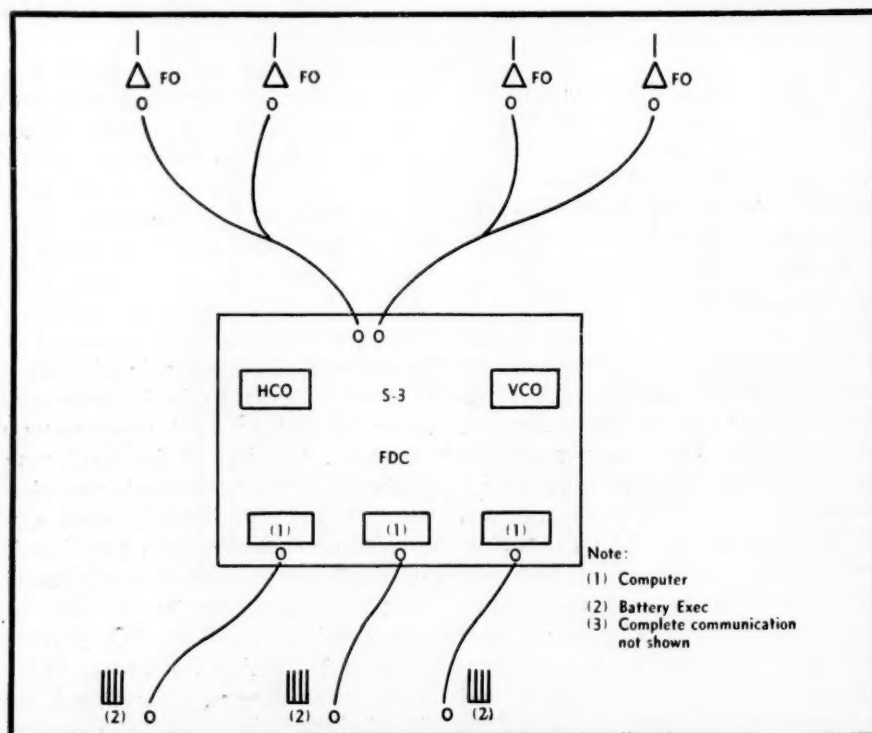
missions using forward observer procedures regardless of the nature of the target, results desired or observer-target range. Consequently, artillery support did not reach optimum levels in that 10 per cent of the missions fired.

A final and minor objection to the system was the opinion of some artillerymen that gunners of howitzer sections who were required to apply base deflection corrections to their sights in order to lay their pieces in the proper direction, were prone to make small errors in addition or subtraction from time to time, thus decreasing the accuracy of the artillery support. In the opinion of the authors, the criticism of the FO's procedures and the gunners' errors were not valid in that with proper training, supervision and indoctrination, both could be controlled. It should be noted that no objection or criticism was raised as to the organization or functioning of the FDC.

As previously mentioned, subsequent to WW II, steps were taken by the Marine Corps to correct the errors learned during that conflict. The 6-gun firing battery was adopted and a system of liaison was developed (see right, above) that has proven entirely satisfactory. T/Os were modified to include a major in the light artillery battalion headquarters and a lieutenant in each of the firing batteries whose sole du-



*The two gunnery systems, WW II, below, post WW II, above.*



ties were to act as artillery advisors to the infantry regiments and battalions. In considering artillery gunnery procedures, it was felt that peacetime training would insure adequate time for training observers and gunners to the optimum degree of proficiency and, since no weakness had been found in WW II fire direction procedures no changes were contemplated in that field.

During the late 1940s, however, the Army in independent tests and studies (Comanche Project) developed a system of gunnery that encompassed changes in conduct of fire, fire direction and minor changes in the functioning of the firing batteries. This system was named the Target Grid Method. Commonly called the Comanche system, it has the following basic advantages over the WW II system: first, it simplifies conduct of fire (with consequent saving of time in training large numbers of observers in time of mobilization) in that all

observer sensings and corrections are made with respect to the observer-target line; and second, it theoretically reduces the element of human error at each gun section in that all guns are laid on a common deflection initially, and deflection readings are directly set on the site after each command with no computation required by the individual gunners. In this latter connection, it is admitted that small (5 to 15 mil) errors are eliminated, but when errors do occur in the Comanche system they are generally made in even hundreds of mils. The primary and significant disadvantage of the system is that fire direction is rendered complicated and comparatively slow to execute and time consuming and difficult to teach. Despite this, and over the strong objection of no small number of Marine artillerymen, the Marine Corps adopted the Comanche system of gunnery in 1949. Today, and after exhaustive tests both combat and otherwise, there still remain wide differences of opinion as to whether our current system of gunnery is producing the desired results.

To summarize briefly then, WW II gunnery provided excellent fire direction techniques but involved comparatively difficult (and time consuming methods to teach) conduct of fire procedures. The Comanche system includes complicated and slow fire direction techniques with excellent conduct of fire procedures. Unfortunately, the two systems cannot be married to produce optimum results. This situation does, however, lend itself to a possible solution.

The long-range solution would be the development, at the earliest practicable date, of a mechanical computer that would permit deletion of the HCO, VCO and firing battery computer billets from the T/O of the artillery fire direction center. The mechanical computer when developed must be accurate, rapid, small, light in weight, easily installed, portable, inexpensive and with a low maintenance factor. Such a computer is capable of being designed and manufactured. The German army in WW II employed a mechanical computer that, although not embracing all of the features described above, functioned efficiently.

Until a mechanical computer replaces current fire direction personnel, however, we must constantly seek means that are obtainable at this time. Such means are available, in the opinion of the authors, and involve a modified Comanche system employing the Rizza fan. This fan, an Army development of recent years, offers distinct possibilities as an interim measure for modernizing current fire direction techniques.

Before passing on to a discussion of the proposed modified Comanche system, a brief description of the Rizza fan is appropriate. The component parts of the fan (see cover) are the body (consisting of an arm and arc), the slide and 3 scales. One scale carries data for powder charges 1 and 3 on one side with high angle firing data for all charges on the reverse side. The second scale contains charge 4 data on one side and charge 5 on the opposite side. The third scale has charge 6 on one side with charge 7 data on the reverse side. The appropriate scale is attached to the two projections on the arm of the fan whenever firing data is being prepared.

Fitting over and moving up and down the arm and scale of the fan, is the slide. The slide has a "V" shaped slot on one side and a hair-line etched across the center. For each round or volley fired, the "V" on the slide is placed against the target pin and then the elevation, fuze setting and drift may be read directly from the scale under the slide. The left side of the slide is V-shaped to permit final self-seating of the slide by application of pressure against the target pin.

The arc of the body of the fan has mil graduations etched into the plastic and is similar to the deflection scale of the range deflection fan.

The base-point line extension or deflection index on the firing chart can be seen through the plastic body of the fan and the deflection to any target is obtained by reading from the deflection scale on the arc of the body of the fan.

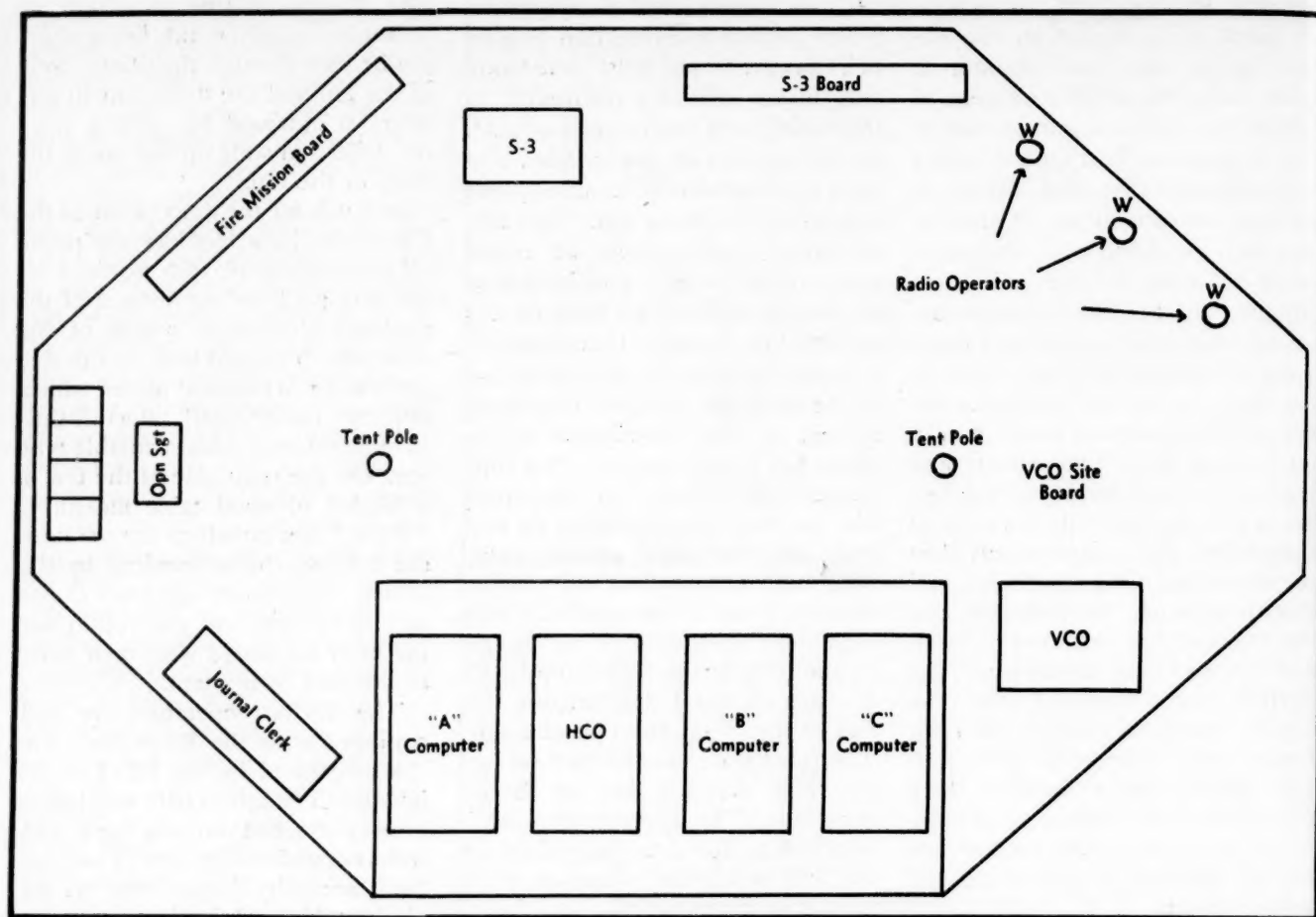
So much for the description of the Rizza fan. Now consider the physical plant (see p 16, top) required for the personnel and equipment of the modified Comanche system of fire direction. The tent used in this diagram is an M1945 CP model which, although rather small, offers distinct advantages over other available tentage. On the right side of the tent is a hinged plywood table measuring 9 x 3 x 3 feet on which are mounted the 4 firing charts required by this system. Four chart operators (3 battery computers and the HCO) and the VCO are seated with their backs to the wall of the tent.

The 4 chart operators are each equipped with the Rizza fan. The chart operated by the HCO is designated the master chart and has an overlay attached showing the tactical situation and no-fire line. This overlay is normally draped over the side of the table and is placed over the chart when required by the S-3. All 4 charts have the location of each firing battery plotted as well as the basepoint line extensions or deflection indices. The 3 battery computers are each equipped with head and chest sets with direct wire communications to the battery executive officer.

At the end of the tent is a telephone box containing 4 EE-8 telephones. Lines to these telephones are laid from the FDC switchboard located outside the FDC tent. The box is equipped with drops and lights that operate when the phones are rung. All fire missions, by SOP, should be called in over one of these







### Modified Comanche FDC Installation

4 telephones. The operations sergeant and the VCO (on a party line) keep their head and chest sets plugged into one of these telephones while a fire mission is being conducted.

Next to the telephone box is the Fire Mission Board (a 4 x 4 foot blackboard) which contains the information shown below, right. This board is used by the operations sergeant to record the fire missions and subsequent corrections as they are called in by the observer. Adjacent to the Fire Mission Board is the S-3 Board which includes the information indicated on the next page. This Board is used by the S-3 to record the S-3 fire order. Also shown in this chart is the VCO Board which is hung from the tent pole of the FDC tent.

So much for the layout of personnel and equipment in the FDC tent. Let us now consider the manner in which a fire mission is processed, employing this modified Comanche system of fire direction. It must be borne in mind that in describing the procedures to follow, it is extremely difficult, if not impossible, to indi-

cate the simultaneous functions that are being executed by the various members of the fire direction team.

The operations sergeant receives a fire mission being called in by a forward observer. The VCO is parties in with the operations sergeant and the latter immediately calls "Fire Mission" loud enough to alert the S-3 and the 4 chart operators. The operations sergeant, as he repeats the elements of the fire mission back to

the observer, writes the mission on his Board. The VCO plots the target, computes the site for each battery and records the site on his Board. The S-3, after verifying on the master chart that it is safe to fire, designates the adjusting battery by pointing to the appropriate chart operator. (In this example, the S-3 designates Baker Battery to adjust).

The S-3 immediately records his fire order on his Board. The opera-

### Fire Mission Board

IDENTIFICATION OF OBSERVER	AZIMUTH	LOCATION OF TARGET	NATURE OF TARGET	TYPE OF AMMO	TYPE OF FUZE	CONTROL
CORRECTIONS						
DEVIATION	HEIGHT OF BURST	RANGE	FUZE	AMMUNITION	CONTROL	

tions sergeant obtains the necessary elements of the S-3 fire order from the S-3 board and sends the S-3 message to the observer. Meanwhile, all 4 chart operators have obtained the necessary data from the Fire Mission Board and have plotted the target on their charts. They obtain the necessary fire commands up to and including the method of fire from the elements of the S-3 fire order written on the S-3 Board and from the Rizza fan obtain the deflection, elevation and fuze setting. The chart operators record their fire commands on their computers' records as they give their commands to the firing batteries.

Initially, the HCO (master chart operator) places the vertex of his Rizza fan in the pin of Baker Battery position and checks the deflection and elevation announced by Baker chart operator. As soon as this step has been accomplished, the HCO immediately checks the data announced by Able chart operator. The VCO has, at his earliest opportunity likewise checked the work of the Charlie chart operator. This check provides a positive means of insuring the accuracy of the data sent from the FDC to the battery executive officer.

As the observer sends in his subsequent corrections for the mission, the operations sergeant records these on the Fire Mission Board. He repeats back to the observer as he records, thus insuring the accuracy of his data. The adjusting chart operator (Baker) plots the observer corrections on his chart and reads the new deflection and elevation from his Rizza fan. The HCO, during the adjustment phase of the mission, keeps the vertex of his fan in the Baker battery pin on his firing chart and continually checks all commands announced by the Baker chart operator. The non-adjusting chart operators, during the adjustment phase plot all observer corrections on their charts but do not send any further commands to the firing batteries. As soon as the observer requests fire for effect, the firing battery chart operators plot the observer's latest corrections and from the Rizza fan take and send the final commands to the batteries. The HCO checks the work of Able and Baker chart operators and the VCO

**S-3 Board**

CONC NO.	SITE BTRY	SITE	CONC NO.	SITE BTRY	SITE	CONC NO.	SITE BTRY	SITE
	"A"			"A"			"A"	
	"B"			"B"			"B"	
	"C"			"C"			"C"	
DF CORR			DF CORR			DF CORR		

**VCO Board**

ADJUSTING BTRY AND FFE UNIT	DF CORR YES - NO	SHELL	CHARGE	FUZE	NUMBER OF VOLLEYS	C. R. 1-c 2-c	TYPE OF CONTROL	CONC NO.

checks the data prepared by Charlie chart operator. A form on which is written the data for replot, with the exception of site, is handed to the VCO by the adjusting chart operator. The VCO computes the site for the mission and records the data for replot on the S-3 Board. The chart operators then plot the location of this target on their respective firing charts.

This system lends itself very readily to the accomplishment of two or more simultaneous fire missions. It is beyond the scope of this article to give an example of the handling of such missions because of the difficulties and time required to describe such involved procedures. This system has been tested by certain Marine artillery units and has been found satisfactory.

The modified Comanche system of fire direction described in this article is not recommended as the only or the ultimate solution to the current problem of modernizing fire direction procedures. It is offered as an interim measure only and has distinct advantages over the system now in use. Some of these advantages are an increase in speed in the delivery of artillery fire support; increased accuracy ensured through a positive system of checking computations and the work of FDC computers and more efficient functioning of the FDC in that most of the noise and confusion encountered in present day fire direction centers is eliminated. Adoption of this system of fire direction would increase the overall fire support rendered by the artillery to supported units. USMC



By Garrett Underhill

ALL PHOTOS BY SOVFOTO

# RED ARMOR

## TACTICS



• HOW DO SOVIET TANK OUTFITS work?

It's not easy for many people to grasp armored blitz warfare, if they haven't trained for it. So let's take a more familiar situation: attack on a well-defended deep position, for which the Reds may use lots of infantry to "annihilate" the enemy forces.

The Russians have a name for this use of armor: "NPP"—"In support of the infantry."

When you get the idea of NPP tactics, it's easier to understand the ideas behind the Reds' "armor-heavy" at-

tacks—ones in which armor's firepower and shock is supposed to carry into and through the enemy outfit, so that the armor's infantry play practically a police role (tank guards in the attack, rounders-up of overrun resistance, outguards of assembly areas).

In this NPP problem, let's suppose the Soviets have come streaming down to wipe out a beachhead. The beachhead is already well-protected by defense in depth. The Soviets, acting fast to get in before further enemy consolidation, decide to give the position "the works" frontally

(which their blitz men hate to do).

Tank-supported recon in force develops the enemy position, which comes under minute scrutiny from observers and infiltrating scouts. While the assault elements are servicing well to the rear—out of artillery range, their officers come in ordinary infantry uniforms (not black coveralls) to observe the enemy and terrain. From this they make out their "tank cards," on which they spell out the initial route of each tank—and locate the probable priority targets.

Some people keep talking about



the Soviets' "massing" for an attack. Don't kid yourself about this. That's World War II stuff. The Soviets could do it from 1942 on because Hitler forced the Germans to stand there with their chins out. Hitler said it was *streng verboten* to give a mile of ground, even if it would spill a Red attack into empty space. And by then the Germans had neither the Panzer nor air power to go in and mess up the usually deliberate Red preparations. They lacked the long range artillery, too. So, before each battle, the Soviets could take their own good time to assemble their steamroller, fuel it up and get it going.

As a matter of fact, the Soviets more or less had to adopt these tactics, because in the 1941 blitz they'd lost great numbers of their trained and experienced commands and staffs. Without these, they couldn't hope to fight fast like Joe Louis. They had to capitalize on their bulk instead, and slug it out slow and hard, like Primo Carnera.

But the Reds didn't like using heavy, crude, bludgeon operations. Many even then would have preferred fast, handy rapier-like fighting. Moreover, most all saw that massive artillery-infantry-armor concentrations were outdated. Away back in '46 the Soviets were warning their Army: "The concentration of large masses of men and materiel is unlikely in the future, because of the danger of its quick discovery and destruction." Also: "The use of powerful forces is possible only under conditions of its swift assembly and commitment to battle." The general officer who spelled this out for the troops stressed that by "swift" he meant a few hours. "The character of battle will be exclusively one of maneuver," he concluded. And he was an infantryman—not an armored blitz advocate!

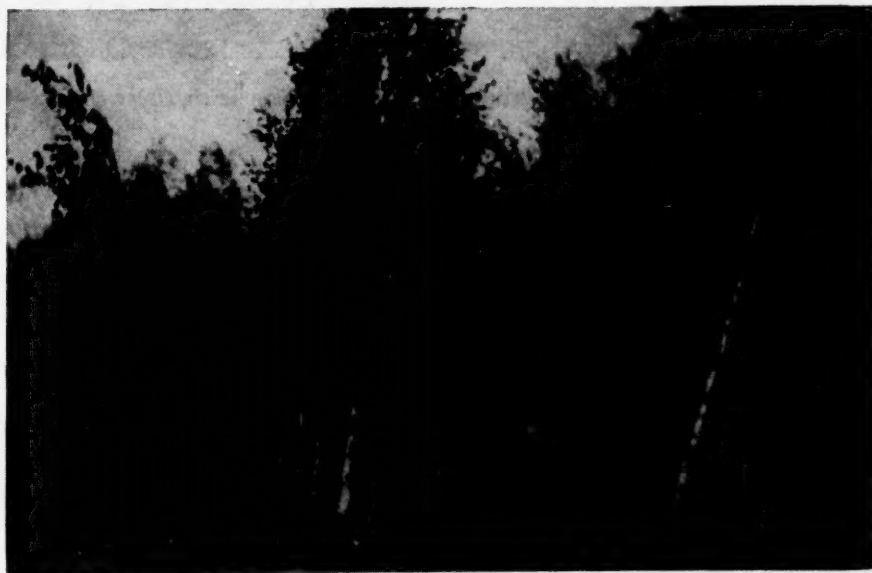
In our situation, all this means that the Reds will try:

1. *To keep their outfits well dispersed and concealed from air before the attack—and behind a good counter-recon screen, with lots of towed antitank guns in cunning ambushes along roads and tank routes;*

2. *To go in for plenty of active deception as well as thorough camouflage and communications traffic*

*security.* They'll try to mislead the enemy as to true Red location, strength and intentions. The Reds may use an outfit from a totally different division to do their scouting and frontal screening. If taken prisoner, these people won't know who's who, or what goes on. And as for radio security, "Blue Hat" MVD troops do the monitoring. (In World

woods, but in any event the tankers dig in well under their tanks. They fear being hit by artillery or by a counterattack before they take off. Indeed, if there's little cover, or if there's much to be feared from enemy air or artillery, the tanks may not bother with an attack position. They may attack right from the approach march.



***Before the jump-off—dispersed and well concealed***

War II they acted so fast that on occasion they had an offender tried and shot within 4 hours of his offense.)

3. *To develop the attack fast;*

4. *To ram through the penetration at one point, so as to:*

a. Flank envelop, finally entrapping the enemy's forward forces before they can withdraw;

b. At the same time, drive fast into enemy rear—trying to mess up the artillery, and catch the reserves off balance.

For if the Soviets don't find a "maneuver situation" in which they've a chance to sweep around the flanks to make pockets, and to get into the rear, they'll try at all costs to make one. This applies all up and down the scale, too—from the field army to the rifle squad.

The assault outfits move into their attack positions at night. The tanks try to use covered routes, their noise being drowned out by artillery fire and noise-making tanks up forward. The tank attack positions may vary from defilade to the forward edge of

As for the assault infantry, it has crept as close as it can to enemy positions. There, it's dug in.

After daybreak, the artillery (which has been working-over all the enemy positions) settles down into a fairly short and very sharp concentration on the "forward edge" of the enemy positions. This is in the form of a World War I type "wall barrage" or curtain of fire. Heavy infantry weapons open up, too. These include towed artillery brought up to support both tanks and infantry with direct laid fires against located weapons emplacements. So it's wise to watch your camouflage security and to keep busy as beavers readying alternate positions.

After a good dose of this fire, the attack begins. It may take off the instant part of the artillery shifts to cover the "depths of the enemy position." This will leave only the light antipersonnel artillery, 76mm guns and 122mm "Hows" to supply steel for the "wall"—together with 120mm and 82mm mortars, of course.

The attack starts when the T-34s cross their own assault infantry's fox-holes. To do this at the time of the artillery shift, they have to leave their attack position early enough to work their way forward. This they do by covered routes, if possible, so as to maximize surprise. Normally they fan out into line before they pass their infantry, taking interval about 120 feet apart.

In standard Red attacks, there's a T-34 to every rifle platoon; a platoon of 3 T-34s to a rifle company; and a company of 10 to a rifle battalion. A tank battalion of two companies—21 T-34s in all—works with an assault regiment, since normally the regiment has two battalions up and one back.

As they roll over their infantry, the T-34s start what the Germans have termed their "mad bull" charge. At this instant they start firing with 85mm HE against the targets marked on their cards. They fire though they're moving as fast as the terrain allows. Although they have so far lacked gyro gun stabilizers (which the Reds know all about), the T-34s have a US Christie designed suspension. It gives them a rolling ride cross-country, kind of like a ship, they say. With this rolling and simple, but smart, mechanical design—and using "Kentucky windage" instead of gadgets—the Reds in training actually expect to get a direct hit on a machine gun nest on the second round at 1,200 yards and better.

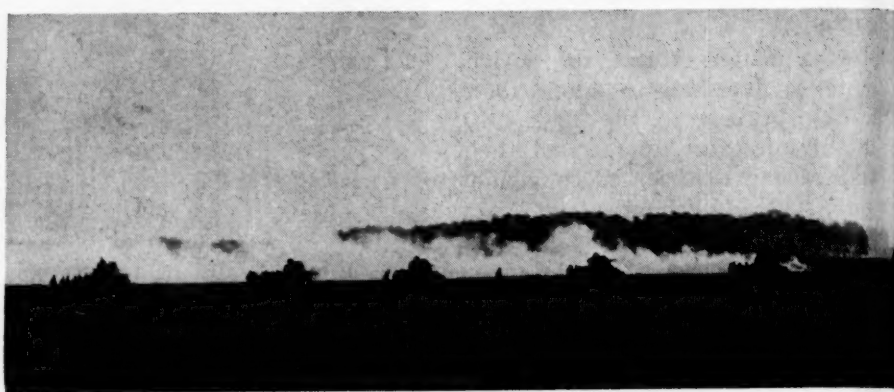
The Reds really don't care whether the "tankists" hit anything or not. The T-34s are trying for psychological effect. Their fire is like infantry "marching fire" only in this case the harassing fire comes from high-velocity 85s in the form of screaming HE tracer shells.

As soon as they're close enough—within 880 yards—the tanks will cut loose with their bow and turret 7.62mm machine guns. This fire is intended to discourage enemy "close combat, antitank." It's sprayed in the general area where recoilless weapons are believed to be.

As the T-34s roll over (note the "over," for like as not it's that and not "through") their infantry, the latter leaps up and starts trying to keep up with their armor. They're not supposed to lag more than 200 to 400 yards behind the tanks, lest



*Rolling with the barrage—full power, straight ahead!*



*A rushing line of armor—120 feet apart*



*Ignoring opposition—the juggernaut rolls on*



*Infantry's assignment—they must keep up with the tanks*

they lose the effect the tanks have when the tanks actually pass over enemy defenses. But since T-34s can make real time in good terrain, this is a tough job. It's easiest when the infantry has been able to creep right up close to the enemy in the night, to dig their attack positions. Often in World War II the wily Reds crawled up as close as 200 yards during the preceding night.

The infantry tries to help cover the tanks with fire as the tanks near the enemy. The tanks give the infantry an assist by crushing down wire in the places planned. They'll fire on targets which the infantry mark with tracer fire. But at all costs, at this stage, the tanks keep rolling. Their mobility is their principal protection.

Their main job remains psychological:

1. To discourage the enemy with their size, noise and even wild firing;
2. To attract fire away from the infantry;
3. To serve as bait, and draw antitank fire.

For when the tanks took off, there moved out right behind them the turretless tanks known as "SUs."

If you really want to know—and it won't do you any good—"SU" means *samokhodniye ustanovki* in Russian, or "self-propelled mount." But in World War II what was originally an artillery matter was taken over by the Reds' Tank and Mechanized Troops, to act and fire like support armor. Generally speaking, these are tanks which carry, low in the front plate, a gun bigger than the tank could mount in a revolving turret. Hence the common JSU version of the Joseph Stalin tank mounts a 152mm long gun howitzer instead of a 122; the SU version of the T-34 tank, a 100mm instead of an 85mm. (See Jan '55 GAZETTE.)

In Russian, both the SU type and the "JSU" are collectively called SUs, but sometimes "SAU"—for SP artillery (pronounced in Russian like the English for a female pig).

These SUs (lacking turrets like first WWI tanks) are mighty low—especially the SU-100s. They're hard to see and hit. They take up covered positions—hull-down, if possible—from which they can watch and cover the tanks' attack. The guns



*At all costs the tanks must keep rolling . . .*



*. . . to bait or overwhelm enemy AT positions*

have very little traverse, but the SUs don't have to worry about their flanks and rear (even if they have no revolving turret) because they're either right in the friendly infantry formations, or towards the infantry's rear edge. Thanks to their big guns, they can thus lay back, and yet cover the tanks up forward.

If an SU sees the flash of an enemy gun or bazooka letting loose on the tanks it's covering, it lets fly with a 100mm or 152mm round. And from its position 300 to 400 yards behind the tanks, it can cover easily up to 3,300 yards—and fire a walloping-sized projectile that's got a big burst—easy to spot and correct.

The Soviets think—on the basis of much WWII experience—that all this places the defenders in a delicate position. If an enemy antitank crew picks up a Red T-34, constant movement makes it a poor target. It's harder to hit than if it fired from halts. If the crew doesn't fire, the tank will break into the enemy position.

If the antitank crew does fire, they must expose themselves:

1. To the tanks' own "marching

fire" which may already be sprayed in their direction;

2. To the Red infantry fire;

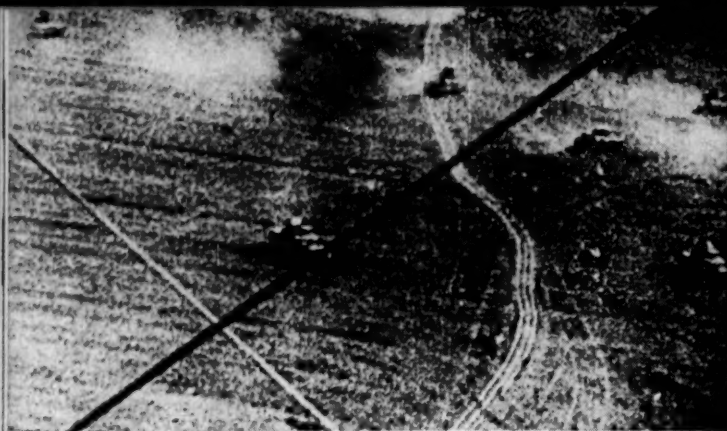
3. To a return greeting from a 34 to 88 lb. HE shell, despatched at a few thousand foot-seconds by a very interested SU.

4. To the charge of the tank itself. (Like the US submarine commander at Tawi, who refused to play the cat to the Jap destroyers' dog and upset the enemy by going right at him, the Red tanks try to upset the enemy by a head-on rush. This is climaxed by trying to mash down his position with the tank's tracks and weight.)

For the Soviet Reds' "tankists" have always been trained and indoctrinated like old-time Mongol cavalry of Genghis Kahn. In WWII and the little wars before it—Spain, Mongolia, Finland—they'd bore right in, take horrible losses. "Tank cemeteries" (as the Germans call them) littered the Eastern Front. "I know plenty of infantrymen who'd been through the whole war," says one ex-Soviet soldier, "but I never met a tanker who had."

In compensation, the "tankists" are

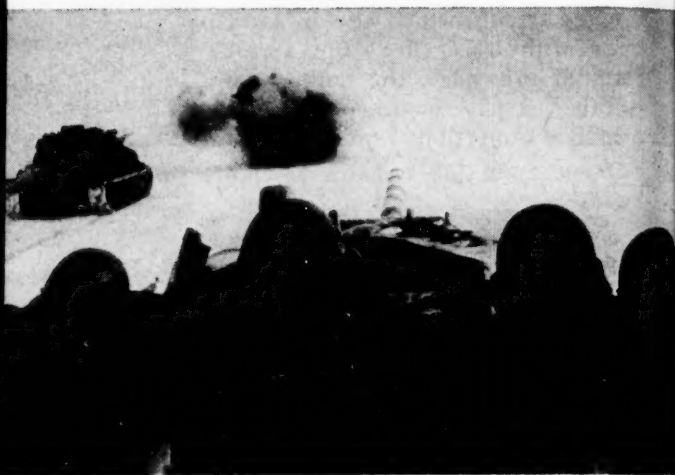




*Indoctrinated with the spirit of Mongol cavalry . . .*



*. . . Soviet "tankists" charge-on despite horrible losses*



officially elite troops. They have their "Tankists' Day." Their officers, along with air officers, get to wear a special garrison uniform. Rivalry between the armored and air elite is great and once several years ago it broke into open fighting one Saturday night in Russia. Men were killed, and as a result drinking was forbidden to all military personnel.

During the entire attack, Soviet light field artillery and mortars are still pouring down their "wall barrage." The Soviet's 76mm guns and 122mm "Hows" have HE shell designed so that it has far less tail spray than our 105 projectile. Hence Red attack troops can follow barrages very closely, as the British can their 25-pounder shell bursts. In the past, Soviet tanks have risked hits which would be dangerous if they hit turret hatches. They've run right into the rear edge of their artillery's barrage, so as to assure fire cover for entry into the enemy position.

Red tactical aircraft will be there—MIG jet fighters firing their 23mm cannon, and maybe bombing and

rocketing, too. The light jet Il-28 bombers, like the Red medium artillery, may well be used mainly to extend Soviet firepower throughout the whole depth of the enemy position, annoy the artillery and tie down reserves.

Marines mustn't forget this Red medium artillery and tactical firepower. In the Pacific and Korea, the US was terrifically superior in these fields. But since before WWII, Russia has stressed both cannon and planes for close support. Despite all US yak about Russia's "new recognition" of city and factory bombing, the fact remains that even today the vast majority of her planes are in "air armies" intended for tactical support. And while the Soviets stripped their divisions of all but light artillery after 1941, they did so only to be able to concentrate their artillery firepower where it was most needed. They amassed and have kept immense pools of corps and army artillery regiments—even "divisions" of artillery of all types. These can furnish light artillery to thicken

division fires, and scads of AT guns to make whole deep areas bristle with counter-recon ambushes.

If the T-34 tanks get separated from their infantry, they'll not halt or return. They'll plow on to their objective, then to a rallying point. This is maybe 2,000 yards or more inside the enemy position, but it is supposed to be within range of friendly artillery. There, they'll organize in a circular formation like a Western Plains wagon-fort. In the past this has often been between the enemy forward positions and their most rearward reserves. The tank machine guns are dismountable; each vehicle carries a tommy gun, too (the M1943 PPS). Like as not, the drivers and their assistants will dig in under the tanks, use the bow DTs on their bipods. When the infantry and engineers arrive to take over local security, the tankers service their vehicles.

Immobilized tanks are supposed to keep fighting, often have. But they may lie doggo until a good target shows up, such as maneuver-

ing enemy reserves.

Or if the attack fails, and deep-in tanks are isolated and out of diesel fuel, the crews will bug out, either by sneaking or fighting. The tankists are good on their feet, too: the peak of their year-long physical conditioning often has been an autumn cross-country run in which they've got to cover 5,500 yards (over 3 miles) within 25 minutes. But they're usually little guys. The Soviets want to keep their tankers small and light, so they can avoid armoring a crew space big enough to hold hulking brutes.

It may be that the Soviets will decide that the infantry can't keep up with the tanks. Then "Tank Descent Troops" will be mounted on the T-34s. The tanks will try to ferry them either right into the enemy position, or perhaps even as far as the tank objective. In WWII, the Soviets sometimes took up to 70 per cent losses in tank riders, just to get a few men into (or through) a German position. This enabled the tankers to really consolidate a position within enemy defenses, thereby hampering enemy withdrawals and counterattacks.

Tank-descent troops can be a real problem during the actual assault if they are from the "Automat Battalions," trained and armed for the job. In the Soviet Army, such an outfit isn't a collection of Horn & Hardart mechanized cafeterias under quartermaster command. It's the Tank and Mechanized Troops own infantry. They carry burp guns instead of rifles, hence a full automatic armament. ("Automat" is Russian for a full automatic personal weapon—rifle, carbine, tommy gun, etc.) To date, the men have carried the famous PPSH M1941—the crude burp gun of Korea. While riding the tanks, these men can spray the countryside with their burp guns and BAR-type DTs (one per squad).

If all goes well for the attack, the SUs will leapfrog from firing line to firing line. This means that maybe half are likely to be out of action at times, for they do not fire when rolling.

There'll be a platoon—2 to 3 SUs—backing each tank company of 10 T-34s. They'll be worked by radio, with both tanks and SU crews picking up targets, and designating them

by tracer or radioing uncoded voice references to pre-set orientation points. When tanks run into a tough antitank nest, like as not they'll dodge around while calling down SU fire. SU unit commanders then may assign as many SUs to the mission as can see the target.

The Soviet system is that the tanks and SUs only *support* infantry. The latter's commanders don't *command* this assigned armor. They only command their own regimental SU-76s, which usually concentrate against targets bothering the infantry (automatic weapons, in particular). Hence at a "tank alarm," the armor temporarily leaves the infantry.

At the alarm the T-34s pull in their horns. The fire fight is taken over by the heavy-gun SUs.

The T-34s aren't out of the fight, though. They retire to the flanks, using mobility for protection, firing now and then from short halts to get good aim. They try to harass the flanks of the enemy tanks, work round to the enemy rear.

More important: they may try to draw enemy armor into pre-set ambushes. For besides the tank-support SUs, the Soviets are likely to hold out an SU battalion (maybe also Stalin tanks) as an antitank reserve. For these, the SU-100's low build and long-range firepower is a big asset. World War II showed that SUs can make use of uneven ground to sneak up on higher enemy turreted tanks. They can make good use of their long-range powerful guns to take a whole enemy tank formation under fire from front to rear, once the ambush is sprung. Hermann Burkhardt Mueller-Hillebrandt, a German Panzer general with plenty of experience against Red armor, warns us that these low-slung Red customers can achieve nasty surprises. In long-range gun duels, the small frontal target they offer is a great asset—in this respect they are better than the turreted tanks in tank vs tank battles.

As the Soviets pass through the forward edge of the defenses they've so thoroughly plotted, they enter into the "combat in the depths of the enemy defense." Whereas in their discussions and problems they spell out in tiny detail the procedures for attacking the up-front enemy defenses—ones they can ob-



*Isolated tankers dig in*



*"Tank Descent Troops" . . .*



*. . .or tank-mounted infantry*



*. . .raise havoc in the enemy rear*



serve and plot, here they break down and confess their boys must play this phase by ear.

It used to be said of the World War I Germans that they had to have everything all organized to the last detail; that their rank and file played sheep to the herding officers' collies; had no initiative, and that even the junior officers were upset when plans failed to pan out. This has certainly been true of the Soviets, though it might be dangerous to count on its always being so. Von Seeckt and his young aids like Rommel and Guderian managed to change the German soldier from a World War I sheep into a World War II fox, and the Soviets certainly recognize the need to do the same.

But the fact is that the Reds' rigid political system (which makes it dangerous even to think your own thoughts lest you betray them by talking in your sleep) is against such a change, even if the Army urges individual initiative.

In our Red attack, this all means that on-call fires from the field artillery most likely become hard to get as the penetration deepens. In WW II, Red artillery often gave the show away by firing barrages along the sides of the spearhead—ones that are planned and plotted before the attack. Of course, whether on-call or fired on schedules, these standing barrages and concentrations only relate to actual targets of opportunity by sheer luck.

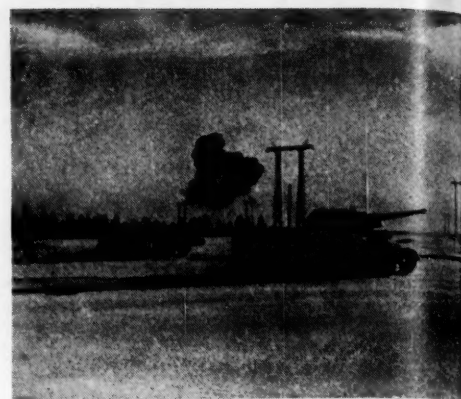
Hence field-artillery type support—and the advantages the Soviets could get from their artillery masses—has tended to fall off often when most needed. So it's the SUs which have taken on more and more of the

artillery's job as the battle goes on.

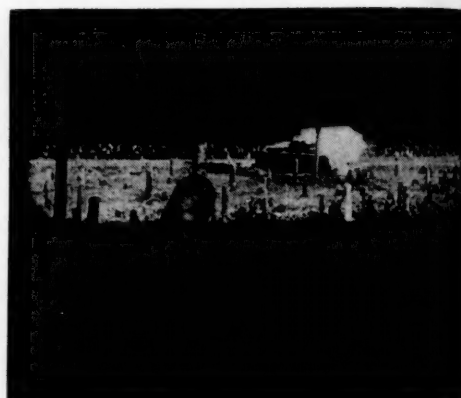
But don't forget that there are wheeled 85mm and 100mm direct-fire gun batteries which are being manhandled or jeeped forward, too. They're part of the effort to make up for low-grade artillery-assault forces teamwork and communications. And while they can act fast, they can only deal with targets in their small area of vision. The Reds thus lose all the advantages of indirect-fire artillery's broad and flexible coverage, its ability to intervene on a broad front, cover flanks and rear.

In a division attack, it has often been that one tank-led rifle regiment will try for the penetration. One battalion of that regiment makes the regiment's main effort. Right behind it is the reserve battalion. When the initial objective is reached, the "penetration battalion" will dig in like mad. The reserve battalion leapfrogs it. Helped by a fresh set of tanks and SUs, it'll add impetus to the attack by its fresh men and materiel. The new forces may continue a penetration—or instead may try to swing around left or right to trap the enemy if he's not left his position. The Red holding attack units on the flanks may meanwhile side-slip forces into the penetration, too.

At this point—or in similar later situation—the Reds may feed in a really mobile armored outfit. It'll make a march right through the narrow gap and try to override remaining resistance, break out into the rear. There it'll fight open warfare and meeting engagements. In our situation, it could make a run for the beachhead itself, the troops



*On successful deep penetrations . . .*



*. . . it's tank vs tank*



*. . . until tank-led rifle regiments*



*. . . leap-frog into the breach*

*Direct fire batteries move up with the assault echelon*





freighted in armored personnel carriers—if available. If not, they'd ride the tanks or "soft" trucks and take their survival chances.

A Soviet "Mechanized Division" could make just such an attack. It has 3 "Mechanized Regiments"—actually motorized infantry which may be carried in armored vehicles, and frequently fight from them—with their own "tank battalion" of US company-strength. The Mech Div has artillery, too. But it also has a mobile punch of armor—a Heavy Tank SP Regiment (which can supply SUs to back up the tanks, and Stalins to attack big strongpoints instead of T-34s;—and a Tank Regiment, which could be rushed through a gap to break out into the open to fight mobile war there.

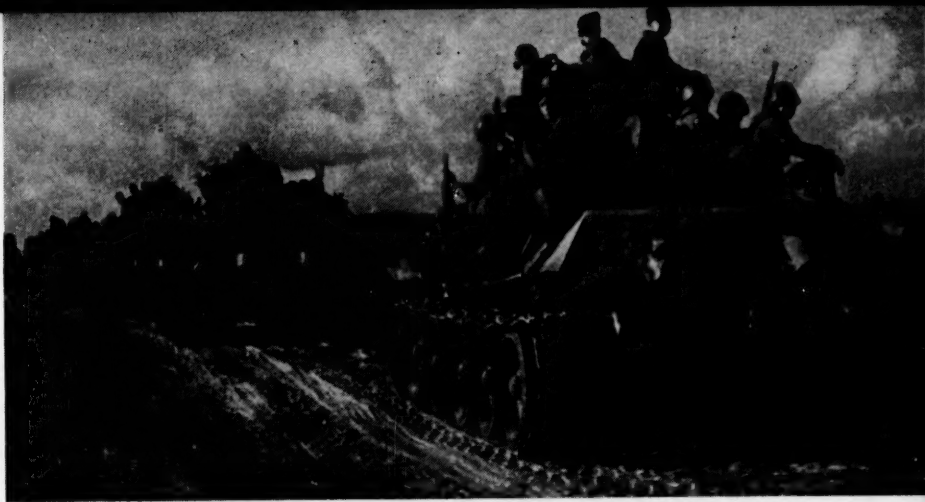
But the Russians who've campaigned for years for Soviet mobile armored firepower don't like this textbook "NPP" attack.

For one thing it's as old as the hills. It got its baptism of fire at Fuentes de Ebro in the Spanish Civil War with old T-26 Russian tanks, and it's been a great favorite of the Red's infantry generals ever since. The only major change in over 15 years, has been the SU backing added in WWII. Not only the Russian Reds, but the Spanish, Chinese, Poles, Czechs, Romanians, Bulgars, Hungarians and Jugs have learned and used it—though often minus SUs. (If need be, turreted tanks can substitute for SUs. Indeed, this was the Stalian tank's first job.)

World War II conclusively showed—say the Russian blitz operators—that NPP is too slow, too inflexible, too weak in armor shock-power for the tempo modern war demands.

Eight years ago, Marshal Paul Rotmistrov, Russia's leading tank theorist, sneered at this as "nibbling away at the defense position." He didn't want any mere single wave of tanks at 30 to 60 yard intervals. (The normal World War II density was about 30 tanks per every 1000 yards of Red front.) He said: "It will be necessary to saturate the battlefield with armor."

Like airmen with bombers, he wanted to use armor's ability rapidly to converge on a given point, give it the works. Armor's speed, he said, will provide maximum surprise—and also maximum security against



### *Exploitation—mobility plus masses of men*

discovery and attack by enemy air, artillery and "modern weapons." Only armor, he said, can quickly build up such cannon and automatic weapons firepower on a narrow front—thus really snow enemy defenses. Only that way can you get through fast, to mess up the all-vital enemy artillery and reserves. After that, you've no longer got a fight—only a cleanup job.

Many observers think that Rotmistrov and his crowd have been top dogs in the Soviet Army since 1947. Increasing mechanization is stark evidence of it.

Not only that: in the years right after World War II, the Soviets went ahead and formed new-type "Tank" and "Mechanized" divisions. Instead of having big "combat commands" and "regimental combat teams," they have smaller outfits—which many Westerners consider more suited to fast mobile action, less vulnerable to air-atom-artillery attack.

Typical of this armor is the "Tank Regiment." It's actually a pocket division, with a battalion of 21 T-34s (the usual US company sized Red tank battalion), an "Automat Battalion" of infantry and a battalion of 21 JSU-152s—to double as artillery and heavy tanks. It's got armored cars and T-34s in its HQ for recon; it's got a flak company, engineers and a service detachment. It can fight and march on its own—or easily move to group with other, similar small packages.

These are the sort of outfits that the West's armor experts have been calling for, and which Germany's Manteuffel originated to fight the Russians—most successfully—in '43. But while we've been yakking, the

Soviets have been acting.

And get this: warnings about Soviet "armorization" aren't to be dismissed as wolf-crying about what the Reds may do in the future. It isn't like saying that they'll have the "capability" of atomizing Chicago and points West in two years come next Whitsuntide. This isn't any "intelligence estimate" (defined in the intelligence racket as "the wildest possible guess"). The Reds have their tanks right on the table—now. And they've amassed reserves so that they can expend tanks the way cavalry used to use up their chargers.

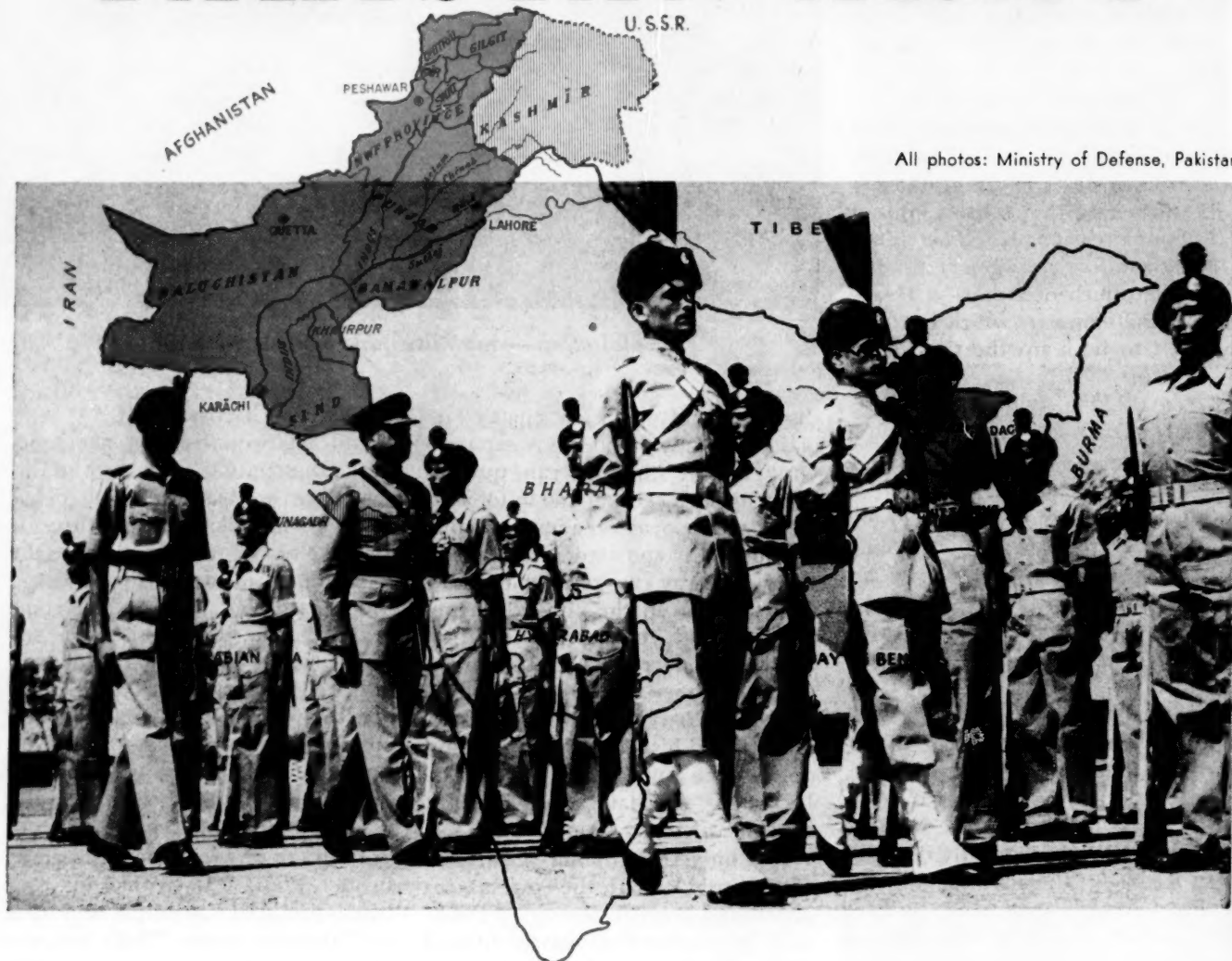
With the way rearmament is going in the West, it'll be mainly guts, brains and skill which will stop them—if they cut loose. That's why you should know your Soviet armor; knowledge is power. Indeed, the whole story of these Soviet forces shows that our big advantage is spirit and ability—down in the companies and batteries—to win not by masses of arms, but to gain "Victory by Brainpower."

Unfortunately, of recent years the Reds seem to have had a certain edge in knowledge, too. Their officers' command post exercises often concern workouts against "tactics and units of foreign forces." So do some of the troop maneuvers. And for years now Russian troop-oriented military publications have carried in their "With Foreign Armies" sections, articles on US weapons, organization, tactics. They've even brazenly cited classified US field manuals by name and number and reproduced their illustrations.

They're trying to teach their men how to fight you. Do you know how to fight them?

US MC

# PAKISTAN ARMY



All photos: Ministry of Defense, Pakistan

**A volunteer outfit, it draws strength from a centuries-old tradition of soldiering**

PAKISTAN, WHICH JOINED THE community of free nations in August 1947, was relatively little known to the American public till the conclusion of the Military Aid Program in February 1954. Since then, however, there has been a growing tendency amongst Americans, particularly amongst members of the Armed Forces, to learn more about this new ally. While the political and economic aspects have been reported fairly extensively in the daily newspapers, there has been little published regarding its armed forces — their characteristics, organizations and combat effectiveness.

The object of this article, therefore, is to introduce the Pakistan Army to the readers of the MARINE CORPS GAZETTE.

## History

Unlike some of the other Asian nations that gained independence in the past decade, Pakistan did not have to face the problems of raising and training an entirely new army. The British, during their rule of what is now the Indo-Pakistan sub-continent, had raised and trained a first class volunteer force — the British Indian Army. Originally raised to guard the warehouses of the late East India Company, it was gradually expanded to a sizable army, and side by side with the British Army, shouldered the responsibilities of maintaining law and order and defending the sub-continent.

In the First World War, it was further expanded and the British Indian Army was successfully em-

ployed in France and in the Middle East.

During the period between the two wars, the Army was reorganized and remodeled as an effective fighting machine and was looked upon as a strategic reserve east of the Suez. This army was therefore destined to play an important role in the Second World War.

Together with the British Commonwealth and American forces, it fought in North Africa, in the Middle East, in Italy, in Burma and in the Southeast Asian theater. Wherever it was called upon to fight, it gave an excellent account of itself and drew the admiration of not only the allies but also of the enemy.

On the eve of the independence, therefore, the British Indian Army



was a seasoned and battle-tested force. Of this Army, a considerable portion was posted for service in Pakistan and formed the nucleus of the Pakistan Army.

### Organization

The late Indian Army organization was the result of intensive study and trials in WWII. The Pakistan Army has therefore maintained the same basic organizations of units and regiments. Its equipment or the role it was to play in the period immediately following independence did not warrant a change in this organization.

It will not be out of place here to mention briefly the difference in terminology between the American and Pakistan forces. Whereas the basic unit in the infantry is still the battalion, it nevertheless forms part of a regiment. Unlike the American regiment, it is not in this case an operational unit or formation. It is the static home of a group of battalions and is responsible for acquiring, training and providing men for its battalions. It has no operational commitment. This ensures that even when the battalion is out in the field, its interests are looked after by a parent organization and that it is getting men who have a pride and loyalty to the unit because of close family ties and traditions. It also facilitates rapid expansion, if necessary. In the last war, some of these regiments had as many as 16 battalions serving in almost all the theaters of war. Infantry battalions, however, seldom operate independently and normally form part of an infantry brigade (American equivalent being a regiment).

Our armored, artillery, engineer and signal battalions are, however, not known as battalions, but are called regiments. Again, it must be borne in mind that these regiments are called battalions in the American Army.

Command and control of the whole army is vested in the Commander-in-Chief, who is responsible to the Minister of Defense for all matters relating to the army and jointly with the commanders-in-chief of navy and air force for the defense of Pakistan. To assist him, he has a chief of staff, who is also the deputy commander-in-chief, and a head-

quarters, with various staff sections to co-ordinate the training and administration of the army.

The field forces have been organized into divisions and independent armored brigades and are located at strategic places in keeping with the nation's defensive plans.

### Fighting Material

The regions now constituting the western part of Pakistan provided the major portion of the late British Indian Army and, therefore, military service and tradition have always been held in high esteem in Pakistan.

Service in the Pakistan Armed Forces is not obligatory for citizens and recruits are selected from volun-



*Gen Mohammad Ayub Khan*

teers, most of whom have had long family association with the army and come to serve mainly to keep up family traditions. They are mostly from the rural areas and belong to the peasant class. These simple village folk, in the last war, proved themselves to be some of the bravest and hardiest fighters amongst the Allied nations. American officers and men who fought side by side with them in Italy, both in the Adriatic sector and the Cassino battle, recall with admiration the courage, vigor and the fighting prowess of these troops. Fortunately for Pakistan, she is blessed with tremendous reserves of this fine material; men who for generations have had the closest association with the rifle and sometimes take more readily to it than to the plow!

**By Maj M. I. Karim**

### Recruitment — Other Ranks

To ensure that the National Armed Forces get the cream of manpower, the authorities have laid down certain conditions in respect to education and physical standards which must be fulfilled at enrollment. Field Recruiting Organization, which has its branches all over the country, is responsible for the selection of suitable men. Besides these, recruiting parties are also sent out by certain regimental centers to those parts of the country which in the past have accounted for most of their personnel. This procedure enables the regimental centers to keep alive their age long connections with the areas and to select personnel whose loyalty, because of family traditions, integrity and devotion to the regiment would be unquestionable. During the course of their training and subsequently, too, this regimental spirit is instilled into them so that in battle they would not hesitate to give their lives to uphold the honor and good name of the regiment.

Each regiment or corps also has Boys Wings where boys between the ages of 14 to 16, and who are either dependants of members of that particular corps or regiment, or have had some family ties with it, are given primary education and military training to prepare them for service with the regular army.

On enlistment, a recruit undertakes to serve for a period of 15 years — 7 years with the colors and 8 years in the reserve. If he is desirable and considered acceptable by the army, he may serve longer with the colors and thereby reduce his reserve commitment.

On completion of his recruit training which varies from 1 to 3 years, depending on the branch of service he wishes to join, he is assigned to a unit of his choice. Inter-service transfers are avoided and inter-unit transfers kept to the minimum so as to give the man every opportunity of knowing all his comrades and developing a sense of security, comradeship and confidence in himself and his colleagues. His unit then becomes his second home.

### Officer Recruitment

The officers of the army at present fall under 2 categories — regulars and temporary commissioned officers.





*Whether in the rugged mountains of West Pakistan or the lowlands of East Pakistan . . .*

Because of a shortage of regular officers and the rapid expansion of the army following independence, it was necessary to fill the gap with temporary commissioned officers. This latter category was made up from selected enlisted men and civilians who, though possessing the requisite physical and educational qualifications were barred from admission into the Pakistan Military Academy because of age limitations. These were sent to officers' training school

and given 6 to 9 months' intensive military training. At the end of the period, those who qualified were given temporary commissions.

Although the policy of the army is to have an officer corps composed entirely of regulars, those temporary commissioned officers will remain until their places can be filled by regular officers.

Officers for the regular cadre are selected by an inter-services selection board from amongst suitable candidates who have passed the qualifying academic examination and have the requisite physical standards. Selected candidates are then sent to the Joint Services Pre-Cadet Training School at Quetta for a 6-month period. Those who graduate are sent to the Pakistan Military Academy for a 2-year course. During their entire training, both at the Joint Services Pre-Cadet Training School and the Pakistan Military Academy, great emphasis is laid on developing, not only their physical and mental qualities, but also moral and leadership qualities. At the Academy they are given a sound educational background and the basic military training required for all arms and services.

#### **Training**

The directive given to the Pakistan Army, after independence, by the founder of the nation was to "defend and maintain our national freedom and the integrity of our country." Though it has not been called upon to fight an aggressor since the achievement of independence, nevertheless it has to keep itself in readiness to meet any threat to the country—and there have been quite a few in the past 8 years. To achieve this state of readiness, the Army has had to put in a great deal of very

hard work. Credit for this is mainly due to the present Commander-in-Chief, whose dynamic personality has been the main driving force.

To appreciate fully the problems it has had to face and overcome in training and making the Army battle-worthy, it is necessary to understand the geography of Pakistan. The fact that the country is divided into 2 parts, separated by a thousand miles of unfriendly India only adds to the magnitude of the problem.

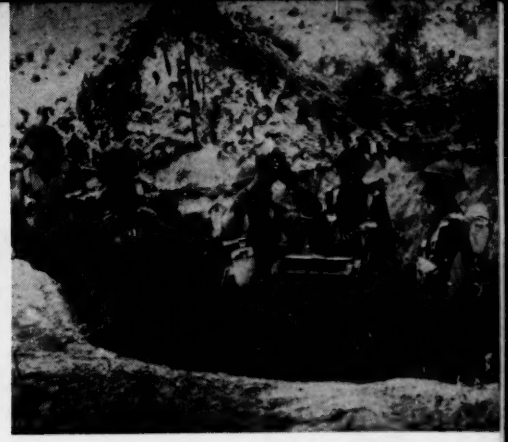
In West Pakistan the western borders adjoin some very rugged and bare mountainous terrain which is somewhat similar to the mountainous regions of southern Utah and Arizona, less the elaborate road network. The eastern part of this section of Pakistan adjoins India for about 900 miles and the country is flat with sparse vegetation in the northeastern section and sandy desert in the southeastern part. The only natural obstacles are the rivers Ravi, Chennab and Jaelum.

East Pakistan, surrounded by India on 3 sides, except for a little bit in the southeast where it joins Burma, is flat, interspersed with numerous rivers and dense jungles especially in the southwest section. It can be compared to the central and southern parts of the state of Florida. The portion which adjoins Burma is mountainous with dense tropical forests and hardly any roads suitable for modern operations.

It can be seen that to defend this country, the Army has to master techniques in mountain warfare, in holding a river line, in desert operations and in riverine and jungle warfare (for East Pakistan). With a small Army, it is therefore vital to ensure that it has adequate training facilities to make it competent to fight in any and every part of the



*Among the Commonwealth's Finest*



... generations of the warrior spirit have made the Pakistani take more readily to the rifle than the plow

country and under all climatic conditions. It can ill afford the luxury of having specialists for employment in different sectors.

Night training and ability to operate under darkness form an important part of the training program because it is visualized that at the outbreak of hostilities, the aggressor would probably have considerable air superiority.

The policy hitherto followed, is to rotate units to both wings of Pakistan to give them practical training and experience in these sectors and under conditions in which they may be called upon to operate.

Training in the Army is continuous—commencing from the individual soldier, it is carried through progressively to include platoon, companies, battalions, brigades and culminates in divisional training camps. At the end of the collective training period, a series of exercises with troops on opposing sides are conducted under the supervision of the Commander-in-Chief's Training Advisory Staff and the Director of Military Training. They involve 2 or more infantry divisions and elements of armor together with their headquarters. These exercises enable the Commander-in-Chief and the operations planning staff to assess the battle-worthiness of units, formations and their headquarters.

Apart from this, the Chief of the General Staff holds test inspections of every unit once a year to ascertain its technical and tactical readiness.

#### Army Schools

Training of officers, junior commissioned officers and non-commissioned officers in the technical aspects of their profession is carried out in the various arms or service schools. Tactics courses for all arms

are conducted by the Tactical Wing of the Command and General Staff College for company grade officers and at the Infantry School for junior grade officers. The Tactical Wing, Armor which is now commanded by a former graduate of the Armor School at Fort Knox, is responsible for imparting training in armor tactics to selected officers of the Pakistan Armored Corps and units affiliated to the armored formations.

#### Command and General Staff College

The highest training institution of the Pakistan Army is the Command and General Staff College which is entrusted with the task of training selected officers in tactics, staff duties, administration and in the functions of command. Every year it trains about 60 students, including officers from the United States, United Kingdom, Canada, Australia, France, Turkey and some of the Middle East countries.

As mentioned earlier, the college also has a tactical wing which normally runs 3 tactics courses a year—2 for company grade officers and a refresher course for senior officers—lieutenant colonels, colonels and brigadiers.

The Staff College at Quetta enjoys a very high reputation and some of the great soldiers of the last war like Field Marshals Lord Montgomery, Sir William Slim and Sir Claude Auchinleck had either been instructors or students at this institution.

#### Equipment

At the time of partition, the Army was equipped with weapons which had been produced during the '39-'45 war and with which it had fought. The 17 ordnance factories engaged in the production of equipment, arms and ammunition of all types were all located in India. Pakistan,

therefore, did not have any ordnance factories. To make up these deficiencies, she had to resort to expensive purchases abroad. She sent purchasing missions to the United States and the United Kingdom for procurement of essential stores and equipment. It was realized, however, that this expensive method could not continue for long. In 1949, the Government initiated a project at a cost of \$99,990,000 to build a modern ordnance factory. The factory at Wah, which has not yet been finally completed, has already started limited production and is now in a position to meet the small arms and ammunition requirement of the army.

Most of the electronic equipment and heavy armament has yet to be bought from the United Kingdom and the United States and a program of modernization has been launched. Nevertheless, it is the constant endeavor of the nation, which spends about 75 per cent of its budget on its defense forces, to see that the sentinels of freedom receive the best with which to defend the country.

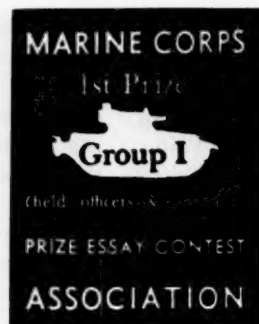
#### Conclusion

The Pakistan Army, with its glorious past and rich traditions, is entirely a volunteer army. Organized as a compact force under the Commander-in-Chief and charged with the task of defending the nation's borders, it strives to produce an efficient fighting force by a process of systematic training under all terrain and climatic conditions. The Army is small and not equipped with the latest weapons, but given the opportunity and proper equipment, it is capable of rapid expansion. Should the occasion arise, it is confident that it will not be found wanting in leadership, courage and fighting efficiency.

US & MC



# AMPHIBIOUS WARFARE TOMORROW



**Prophets of gloom and doom have never had a place  
in the Corps, and now comes the greatest challenge**

**By Col Robert E. Cushman, Jr.**

THE TIME HAS COME TO TAKE A long, hard look at the concept under which we will wage amphibious warfare in the near future. Instruments of war, of far-reaching effect, are moving from the drawing board to the testing and evaluation stage. Of course, we all realize that the changing organization, unit tactics and equipment must be evolutionary rather than sudden, for a revolutionary shift could bring disaster. We might find we had discarded working tools for drawing board plans and single prototype models. A war forced upon us tomorrow would then find us unprepared. Therefore, we must go slowly in this area — awaiting the development of new equipment, then testing and evaluating its use in the field, and finally changing organization and tactics to obtain the maximum advantage from the new developments.

The development of basic doctrinal concepts requires a different pace. These underlying precepts need more "lead time" for study and adoption. If developed sufficiently

early, they can form the basis for requirements for new weapons systems. In any case, they are needed before changes in organization and minor tactics are made, so that the many alterations in these fields will take the same direction and be given cohesiveness by a sound overall doctrine. To illustrate, it is not now time to suddenly reorganize the air and ground units of the Fleet Marine Force to fit them to ship-to-shore craft, water and airborne, that are now on the drawing boards. But it is time to develop principles by which the new tools should be used. Then we will be able to make a sound reorganization when the "hardware" becomes available to combat units.

Major strategy and tactical principles must be examined. Some may feel that strategy is outside the province of the Corps. This is erroneous. The exercise of seapower is strategic, and the Fleet Marine Force is one major element of seapower — it is the means whereby seapower is projected ashore. Furthermore, on matters of concern to the Corps, the Commandant of the Marine Corps

sits with the Joint Chiefs of Staff, and the major function of that body is strategic direction of the Armed Forces. We will examine strategy, therefore, as well as tactics.

## STRATEGY

There has grown up since the Napoleonic Wars a theory of absolute strategy, characterized by such terms as "total war" and "the nation in arms." This culminated in World War II with "unconditional surrender." An accompanying phenomenon was the apparent separation of war from political objectives. In some cases it seemed that the assuagement of moral indignation was a valid war aim.

Now this was not always so. The dynastic wars preceding Napoleon closely wedded political objectives and military aims. When the political objective was attained, military action was concluded. We may call this a theory of limited strategy. The most recent example, of course, was Korea. Disagreement with the theory or the results does not alter the fact that our political objective was to stop Communist aggression from taking southern Korea. When this was achieved military action came to a halt.

We can then postulate the two





types of strategy, absolute and limited. In absolute strategy, we aim to destroy completely the will and ability of the enemy to wage war and we insist upon far-reaching changes in his political leadership and objectives which will conform entirely to our desires. In limited strategy, we strive to impose our will upon the enemy to the extent necessary to make him stop a particular course of action inimical to us. Political changes may or may not result in the hostile country. His capacity to wage war will still exist; however, our political objective will have been achieved.

What will be the character of war, and the influence of amphibious seapower, under each type? I think that absolute strategy will call for massive blows against all targets which can contribute to the enemy war effort, seizure of areas of great strategic importance to the enemy, continuing pressure upon strategic points and upon the important elements of his armed forces until he capitulates. Complete destruction of the enemy's armed forces may not be necessary, but these forces must be fought to a standstill. They cannot be permitted to seize, hold and exploit resources which will replace those destroyed in the homeland. Thus, landpower and amphibious

seapower will conduct *offensive* action to fix the enemy in position, seize hostile strategic areas by defeat of enemy forces in those areas and exhaust the local resources of the enemy in the field. Meanwhile, air power conducts the massive blows which destroy the fountain of resources without which the enemy must eventually collapse, and throws up the protective (although offensive minded) air umbrella without which forces cannot live on the combat fields of tomorrow.

On the other hand, limited strategy will probably call for the destruction of the enemy in a limited area of operations; the use of atomic weapons in a tactical role within that area; prohibition against massive strikes against civilian and industrial targets removed from the scene of operations; and eventual complete control of the area of combat by our forces. In this type of strategy all forms of power — sea, land, air — will form a closely-knit, joint team which will achieve the overall objective by the tactical application of force. Note, however, that the limited strategy of the future does not imply a so-called conventional limited war — I believe that all modern weapons of a tactical nature will be used; it is merely the strategic and political objectives which will be



limited. They will be limited solely because the price of absolute strategy in future war will be prohibitive to both victor and vanquished. The only true objective of sufficient importance to justify resort to absolute strategy is national survival. However, this may be forced upon us, either full blown by the enemy or by spontaneous combustion from what starts as a war of limited strategy.

At first blush this seems bad. It looks as though we need two kinds of Marine Corps to fight in these two types of conflict. We have heard much talk to this effect. But I think that reflection upon the analysis made above will show that amphibious seapower has similar roles in each kind of war. The operating conditions may vary; more flexibility may be permitted in a limited strategy because less effort need be devoted to continuing defensive tasks such as protection of sea lines of communication to the Western Hemisphere. A greater calculated risk may be taken in certain cases to permit a greater concentration of power at desired points. But the essential scope and opportunity for employment should be about the same. In both cases, amphibious seapower, by *offensive* action, will seek to seize areas from which to further project naval power against the enemy, capture and deny to the enemy areas vital to the exercise of his seapower, and assist other forces in the defeat of enemy groups accessible from the sea.

This excursion into what is sometimes called grand strategy leads us to consideration of certain strategic principles—the objective, mass and the advantage of operating on interior lines, which is closely related to the first two.

We need to analyze carefully what we mean by objective. The principle that we need one is not questioned. But what the nature of a suitable objective may be in future war is a pertinent problem. Seizure of a naval base? Seizure of a port area? Seizure of an airfield? These classical objectives are on the way out. After their seizure, our use of them can be prevented by atomic means. Similarly, if our object is denial of their use to the enemy, atomic weapons will probably be the more economi-



**Certain terrain areas have vital approaches—Ljubljana Gap**

cal road to success. Therefore, the objective must be, in the future, a terrain *area* and the hostile forces therein. What kind of area? It must be an area of strategic nature through which enemy power must pass before it can be applied against more distant strategic objectives in the rear, or from which our power may be projected against more distant strategic objectives in enemy territory. Such an area must be extensive, including within itself many widely dispersed points upon which our air power can be based (by methods described later), facilities for dispersed support and strategically important natural or man-made features such as industrial centers, agricultural areas and essential communication lines.

This area should be impractical to by-pass by land with significant forces, and it should impose a high price upon detouring by air or sea. Examples of such areas might be: the entries onto the North German Plain; the area from the Alps to Trieste, including the Ljubljana Gap; the Bosphorus-Dardanelles area and the Black Sea littoral of the Ukraine. Similar areas are apparent in Asia.

The above-mentioned areas have, in general, the physical characteristics required; they might or might not be proper objective areas, depending upon the friendly and enemy strategic situations. I have selected as examples those within reach of seapower, at least under certain circumstances which could be assumed. There are others which would require independent airhead operations for seizure and do not

enter into this discussion of amphibious warfare. The point is that we must widen the scope of our thinking in relation to objectives. The tiny island, the single port, the small area with one bomber and two fighter strips laid end to end—these will no longer be proper objectives. We must think in terms of areas 200 miles in width and depth. This should not be hard for Marines, for our *initial* objective has always been a *tactical area*—the beachhead; now our *final* objective must also be an area—a *strategic or vital, area*. But are such large areas within the capabilities of the Marine Corps to seize and hold, at least until other forces arrive? I believe that the subsequent discussion will show that they are.

We have seen how the principle of the objective had to be re-examined, not as to its total validity as a principle, but as to the exact meaning of the word "objective" in the war of the future. In a similar manner, we must look at the principle of mass, or concentration of force as it is sometimes called.

It has long been accepted in this country that this principle of mass does not necessarily mean massed manpower. We realize that a combination of firepower and manpower must be concentrated against the selected point in the enemy defense system. But in the past, this has still meant considerable personnel, not only to transport and operate the instruments for delivering fire, but also to hold in strength the ground seized; to defeat the hostile ground troops who were for the most part



merely neutralized rather than destroyed by firepower; and to provide protection against defeat in detail. The limited range, duration and effect of firepower were such as to require that attacking groups remain within mutual supporting distance of each other. All of these factors resulted in considerable battlefield congestion, even in our forces, which have always recognized the advantages of dispersion and the use of firepower rather than manpower to achieve victory. It may be added that this congestion on the battlefield resulted in compounded congestion in the logistic areas to the rear.

How have these factors been affected by the weapons we shall meet on the battlefield of tomorrow? They have been altered irrevocably. Tremendous firepower can now be un-

copter or other suitable aircraft.

Here then we have the concept of the future. The tactical application of immense firepower, followed up by many small attacking groups and supported by Marine airpower for delivery of fire against targets of opportunity and for rapid shifting of reserves. Thus, massed firepower has replaced massed manpower. As a matter of fact, massed manpower is now an invitation to disaster and must be avoided at all costs.

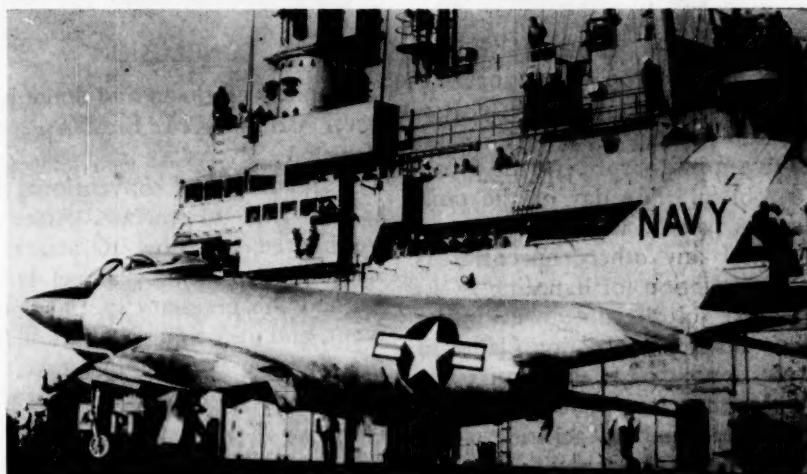
If we are to attack an area rather than a point, and if we are to use massed firepower rather than massed men, then the advantages of interior lines disappear. Operations on interior lines result in a congestion of supporting air installations, logistic means and lines of communication that invites destruction. The former

small landings, both helicopter and waterborne, against these key points. Thus the force is established ashore — this is the new beachhead. Questions arise — how do we subdue the rest of the area and complete its consolidation? Once we have the area, how do we avoid becoming saddled in turn with the disadvantages of interior lines and resultant congestion of resources? How do we subsist logistically? What is to prevent the enemy using the same tactics against us? The answer lies in the area of tactics, and to this we now turn.

## TACTICS

The answers to the above questions depend primarily upon the proper application of amphibious airpower. Four principal functions must be successfully performed if this new method is to work. These are: (1) the achievement of air superiority over the area with a high concomitant air defense performance; (2) aerial fire support, both close and general; (3) tactical movement of troops into battle by air from either ship or ground assembly areas; and (4) new aerial supply concepts in the logistic field. These functions must be coupled with new methods of basing and operating which will depend upon new advances in the research and development field. These advances are not in the "dream world" category, but are in the prototype stage as reported by the daily newspapers.

The attainment of general air superiority will be a continuing task for all forms of airpower. It is beyond the scope of this paper. Suffice it to say that without air superiority no operation with staying power can be conducted in the future, whether by land, sea, or air forces, or combinations thereof. With this general condition met, it will be the task of amphibious air power to strengthen in degree and to maintain local air supremacy over the amphibious forces and the area of operations. Once ashore, aircraft must be based on many dispersed and relatively indestructible points and provide a really tight air defense in conjunction with other antiaircraft weapons. This will cut down the danger from that of disaster to that of calculated risks and allow us to carry out our assigned tasks in accordance with the



*Amphibious air — to strengthen and maintain local air supremacy*

leased by weapons which do not require large numbers of men for their operation and servicing. The primary effect of the weapon is destruction rather than neutralization; the enemy can mass personnel for defense only at his peril. This means that we will not need as many personnel for the purpose of defeating remaining enemy ground forces and for holding the terrain seized. Defeat in detail may remain a threat; the enemy will certainly have highly mobile armored counterattack forces which will be a great danger. The answer to this lies not in greater concentration of attacking groups, but in command of the air. This will provide the mutual supporting link required; our aviation can provide prompt delivery of immense volume of firepower and can effect rapid re-deployment of ground units by heli-

advantage of interior lines was that forces could be rapidly concentrated for successive blows at relatively weaker enemy forces attacking from different positions on the periphery. Under present conditions, this concentration of the attacking force again invites disaster. Conversely, in the future the advantages will lie with the attacker who directs many small groups against a wide number of points within a strategic area and supports this attack by concentrated firepower against enemy concentrations, installations and counter-attacking forces.

It is submitted that the strategy of the modern amphibious operation must follow the above precepts. Devastating atomic blows are delivered against key points within a large strategic area and are immediately followed up by many relatively



new tactics.

Air support must be fast, positive and safe. This requires the utmost in responsiveness to the amphibious troops commander. The new Marine air-ground task force organization will, to my mind, provide this in the necessary degree. Improvement in the mechanics of air support must continue, but no radical innovation is needed.

Air transportation of units into battle is the key to complete victory within the strategical area discussed previously. Once the various attacking groups are established ashore in the key points of the area, operations must be undertaken to destroy the remaining hostile forces. First priority will be the mobile reserve of the enemy, followed by other forces which can interfere with our mission. Finally, all remaining groups can be mopped up. The procedure which must be followed is: location of the hostile force by air and ground reconnaissance; the fast movement by air of sufficient troops to destroy the enemy force by battle — concurrent with this movement, the delivery of aerial firepower against the enemy group. A variation may occur in case the enemy does not initially present a sufficiently concentrated target for atomic attack; then it may be possible for our ground forces to attack in such manner as to force him to become a suitable target.

The logistic support of the widely dispersed groups envisioned in this concept must be accomplished by new methods. Large dumps incur an unacceptable risk. Many small dumps under control of the higher echelons are unacceptable because of the manpower requirements for handling and guarding which are generated by such a procedure. The only solution is supply direct from

the water to the using unit, and this can be done only by air. For food, ammunition and medical supplies we thus eliminate at one stroke the dangerous and time consuming unloading over the beaches, or through a vulnerable port, and the long truck conveying to dumps and to users. Helicopters or sea transport planes can pick up these types of supplies from ships at sea and deliver them directly to battalion landing teams. Remember, too, that ammunition requirements should be less, since tactical atomic weapons deliver much more explosive effect for a given weight than do conventional munitions.

Certain heavy equipment, such as tanks and larger vehicles, will have to be unloaded over beaches, but this should be feasible since we have eliminated most of the congestion at the beach by aerial delivery of other material. As will be shown later, the requirement for heavy engineering equipment should be greatly lessened also in future warfare.

POL supplies represent the greatest problem. The day of the tank farm has passed, as well as the usefulness of any other concentrated, fixed installation for handling POL. A possible solution lies in using the aerial tanker for refueling planes in the air, not to extend their range but to make unnecessary the installation of elaborate fueling facilities at the plane's base. This should be combined with the use of lightweight but strong plastic bags, filled with fuel at sea and delivered by helicopter to certain bases and units. The container could be lowered gently by the helicopter's crane. This might be particularly useful for supplying motor gas. These two methods could, of course, be augmented by using some well-dispersed and protected tanks which could provide a reserve

supply in case of need.

We mentioned earlier that base facilities for aircraft should be relatively indestructible. How can this be attained? Two methods come to mind. First is the use of vertical rising, high performance aircraft, and second is the use of water-based high performance aircraft. It is not possible to destroy all of the ground suitable for the former, nor the water areas usable by the latter. In short, our high performance aircraft would have the same freedom of action relative to landing fields that is now enjoyed by helicopters. With every open field, every river and lake, every stretch of seacoast constituting an air base, who can doubt that we could carry out the air operations essential to a modern concept of amphibious warfare?

## CONCLUSION

Prophets of gloom and doom have never had a place in the Corps. Marines have always "thought big," and well in advance of conventional and current ways of warfare. After all, we figured out how to attack an island surrounded by a reef before we had the necessary special equipment, and at a time when most people thought we couldn't take any island even when no reef existed to interfere!

New reefs loom ahead. But this time there are already in sight the new developments which, properly used, can get over those obstacles. Our job is to find the best ways of using them, in an age where a mistake means destruction. In that spirit, this concept is tendered: Offensive action by small, air-mobile groups in conjunction with massed destructive firepower; the seizure and defense of relatively large strategic areas by a combination of air support, air movement and concentration of small battalion combat teams, and effective air defense; and logistic support by means of fast-moving water-air lines of communication which do not become concentrated or congested.

In conclusion, I consider this to be the greatest challenge which has yet faced the Marine Corps: in this atomic age, to formulate a sound concept of modern amphibious warfare.

US MC

***POL must come by air — the day of the tank farm has passed***





# BLOW UP YOUR AUDIENCE

**With only a handful of men but lots of enthusiasm, Marines put on an Armed Forces Day demonstration that had the public on the edge of their seats at Dover, NJ**

**By 1stLt J. W. Kennon**

*... the forward zone, where war is girt with horrors, and common men endure these horrors and overcome them, along with the insistent yearnings of the belly and the reasonable prompting of fear; and in this, I think, is Glory.*

John W. Thomason

AND THAT IS WHAT THEY WANTED to show them. No faceless maneuvering of tons of steel, no impersonal ballet of whistling air frames. They wanted to bring it down and lay it in their laps—war for the infantryman—the isolated, tightly circumscribed, graceless routine of death—a rifle squad in the fire-pit of battle.

But what can a security detachment offer in the way of an Armed Forces Day demonstration? The CO of a Marine Barracks will have perhaps 50 men. That's the whole shooting match—the guard platoons, office and supply personnel, everyone. Security will have to be maintained. About 40 men can be made available. What can be put on? How can you show them "Power for Peace?"

A demonstration of fancy drill? Nice, to look at, but the audience (civilian mainly) is not too impressed by parade ground maneuver. The number of people who will come any distance to see troops drill wouldn't fill a sentry box. Could things be spiced up with a display of weapons? Sure, that always looks good, but how far will they come just for that?

All right, how about giving them some blood and thunder—hit 'em right between the eyes with some John Wayne-Quantico demonstration stuff. Sounds great, but this is a small security detachment, it doesn't have and doesn't rate most of the stuff it would like to use. So what can you do?

Well here's what one small unit did for Armed Forces Day with only 2 weeks notice. It was nothing too impressive, but it was well received and it makes an interesting account.

This command decided to put on a small "assault of a fortified position" demonstration. The area in which the show had to be staged is shown above. It was planned that a rifle squad supported by a light machine gun section (minus) and an as-

sault team, would attack and destroy a mutually supporting 2-machine gun bunker position protected by infantry.

The command had available: sufficient rifles and 12 blank firing attachments; 4 BARs (no blank firing attachments); an LMG with blank attachments; an HMG with blank attachment and a rocket launcher.

The local availability of weapons having been determined, some thought was given to a target, or focus, for the attack. Dummy bunkers was the answer. Using cinderblock and railroad ties, stockpiled on the station, 2 realistic bunkers were constructed by a 6-man working party in about 2 hours.

The blank ammunition available to the command was counted and a rough script for the demonstration was proposed as follows:

A rifle squad, with attached machine gun section, would attack eastward across the softball field, attain fire superiority over the enemy position (2 bunkers) and reduce it by assault.

We were fortunate in that the commanding officer considered the demonstration, and the time devoted to its preparation, as a valuable aid to troop training. Accordingly, he directed that pains be taken to make the problem as tactically sound as was possible within the limits of the area used.



In connection with a planned display of Marine Corps weapons, the commanding officer directed his executive officer to determine if a flamethrower could be borrowed. A flamethrower was found to be in the possession of a reserve special infantry company some 40 miles distant, through whose good offices it was obtained. Arrangements were made to borrow this weapon and a detail was dispatched to pick it up.

The I&I of the unit, an extremely obliging gentleman, offered the pick-up detail coffee and asked them if there was anything else that they could use. It was a fateful question. When the detail left, his storerooms looked as though the locusts had been there. When the detail walked out, they carried a M2A1 portable flamethrower with spare air bottle, a roll of combat telephone wire, 4 blank attachments for BARs, 4 Aggressor uniforms, a case of blank ammunition, and some very precious items, 30 Marine Corps camouflaged helmet covers.

Their sole regret was that they had not brought a bigger truck.

When the Naval Captain commanding the Station heard about the flamethrower he became enthusiastic about its use in the demonstration. But there were obstacles—no igniters (match cylinders) were available.

Nevertheless, a man was schooled in the use of the weapon and it was loaded with water to test-fire it.

The engineering department of the Naval Station was able to recharge the air bottles with nitrogen. While a search for a possible source of igniters was initiated, a careful study of the safety factors involved in the use of flamethrowers was undertaken. The results were favorable. It was decided that, under a rigid central control and co-ordination system, the flamethrower could be used.

The prospects for being able to present a really professional looking demonstration were becoming more favorable every day. Enthusiasm for the idea was rising throughout the command.

Then the training officer got into the act—he considered what a few properly employed pyrotechnics would do for the show. A request for a small amount of firecrackers and pyrotechnics was somewhat hesitatingly submitted. Happily, it was filled!



Obtained through the request were: a small number of red, yellow and green smoke grenades; a quantity of firecrackers, M-80; artillery burst simulators (large whistle-bang firecrackers with pull-igniter fuzes); 2 white smoke pots and flamethrower igniters. The whole thing was beginning to look like a case of "ask and you shall receive."

It now became apparent that if this equipment were to be used, close co-ordination of the entire problem would be necessary. The newly-formed reserve company on the Station had just received 4 field telephones (EE-8). These were borrowed and a re-examination of the problem was begun.

The 2-bunker enemy position was arranged so that one bunker was set with an aperture to fire directly across the battlefield so as to enfilade the Marine axis of advance. The other was sighted to fire up the railroad line "off stage," so to speak.

It was determined that the bunker sighted to fire off stage would be the "burn bunker" (the bunker to be assaulted by the flamethrower). It was chosen because it was the one which could be taken on the flank. Of course, in order for this to be done, it would be necessary to "destroy" the other bunker. How to do the job in a realistic manner posed a problem. The problem was solved as follows:

The fact that buildings surrounded and restricted the demonstration area was an asset. The "blowdown" bunker was constructed on 2 pillars of cinderblock with railroad ties balanced on top and alongside the pillars. A hundred yards of telephone pole guy-wire cable was obtained. A loop of this wire was placed around the pillars. The other end of this cable was attached to a wrecker truck which parked behind a nearby building (out of sight of the bleachers). When the truck

pulled the cable, it caused a seemingly solid earth and timber bunker to collapse flat to the ground.

There remained only to offer to the public (and the troops) some reasonable cause for its collapse. Negotiations to obtain strike aircraft to make passes over the "blowdown" bunker, as it was collapsed, were successfully completed. Rehearsals including the aircraft were about to begin. Unfortunately the command found, in checking the regulations, that only the Chief of Naval Operations could sanction such a demonstration over a Naval Station. Somewhat reluctantly the idea of the plane was dropped. At one time during negotiations for aircraft, the command had a proposal to use a flight of 12 fighter bombers. This proposal was regretfully discarded. Among other objections, the feeling was general that a squadron of fighter-bombers was rather *too* effective support, even for a Marine rifle squad.

The rocket launcher was substituted for the aircraft. It was employed as follows:

The rocket team took their positions. The gunner raised his weapon and a member of the co-ordination detail detonated a burst simulator low and to the left of the blowdown bunker. The second "round" fired in this manner burst in the aperture of the bunker. At this second burst, the wrecker moved forward and dragged the bunker down. The cable was not noticeable from the bleachers. In fact, a demolitions sergeant from the reserve company watched the demonstration from the bleachers and later asked the Marine Barracks Training NCO how large a charge of demolitions had been used to destroy the bunker and how they had obtained permission to use explosives. At the show itself, one of the guests, a colonel of the Army Ordnance Corps, was convinced that



the bunker had been blown apart by explosives. It was quite convincing.

Meanwhile, preparation of the flamethrower for use continued. In the use of fuels for the flamethrower, it was first thought that napalm would be best, in that it would not be as liable to create a hazard if we had adverse wind conditions. The command was able to obtain enough fuel thickener to mix 20 gallons of napalm. It burned satisfactorily, but we thought that it didn't give the visual effect that diesel fuel would. Accordingly the decision was made that napalm would be held in reserve. If wind conditions on demonstration day were favorable, diesel fuel would be used. This was, in fact, the case.

In training, the flamethrower operator fired the weapon 4 times with water and 5 times live prior to the demonstration. But the main difficulty came in co-ordinating the problem so that absolute safety could be assured. Several methods of co-ordination were discussed. A public address system was borrowed and the narrative for the problem was prepared. Control and co-ordination were finally established on the basis that the demonstration troops could hear the narration as well as the audience could. Therefore, the troops were instructed that they would perform a particular part of the demonstration only when the narrator had described the evolution to the audience. In other words, the demonstration troops received direct orders for each movement from the narrator. Troops were instructed that they would not attempt a particular movement until the narrator mentioned (ordered) that the movement was about to be made. The narrator was in telephone communication with 3 other co-ordination points. He was not to "mention" that something was about to occur until the other 3 co-ordination points had certified that conditions were safe.

Certain parts of the narration were recorded on a Navy tape recorder. These taped portions were complete with homemade sound effects, hoarse panting voices, etc.

Portions for which a script was prepared and recorded were: 1) The rifle squad was marched on the field and its composition was explained. 2) The general and special situations

were set up — "Aggressor troops had landed on the eastern shore of the United States . . ." " . . . A squad of our company is mopping up in this area. . . ." 3) A mortar adjustment (radio conversation) so spaced as to co-ordinate with thrown cherry bombs. 4) Squad leader's order to his fire team leaders. 5) An artillery adjustment so timed as to co-ordinate with a "planted" adjustment and "fire for effect" by burst simulators.

Not only were these taped transmissions interesting and instructive to the troops, but many of the civilian guests in the audience felt that it added much to the demonstration.

The problem was rehearsed 5 times; the last being full dress. The value of the helmet cover as an identification symbol and mark of pride was never more clearly demonstrated. As soon as the troops were issued them, they fell immediately into the spirit of the problem. Their enthusiasm increased daily as Armed Forces Day approached.

In using burst simulators, it was discovered that if they were tied down in pairs and the fuzes pulled simultaneously an air burst of one of the simulators could quite often be obtained. Because of minor fuze variations, one would tend to blow the other into the air, the second bursting at a height of about 10 feet.

In the problem, no assault unit was allowed to approach closer than 100 yards to the "burn" bunker with the exception of the assault fire team. The 4-man Aggressor team was emplaced in foxholes behind the target bunkers. Before the assault fire team, with flamethrower, was mentioned by the narrator as about to commence its assault (i.e. ordered to advance), the Aggressors smoked themselves and "bugged out." The Aggressors reported to a co-ordination point at a safe distance from the "burn" bunker and were counted by the co-ordination chief at that point. Not until this agent had informed the narrator, was the flame team to

advance to burn the enemy position.

The fire team then advanced to an assault position and one man moved out to smoke the bunker. A satchel charge (contrived with burst simulators) was placed. Following its explosion the flamethrower man moved in. After checking to see that all other member of the assault group were behind him at a safe distance, the flamethrower man lighted his "match."

All of this co-ordination, happily, worked out so smoothly that no apparent pauses in the sequence of events took place, and yet the possibility of accidents was reduced to the vanishing point.

To simulate cover on the field, lines of cinderblock were laid at angles across the ball field. These lines were one block in width and two blocks high. Scrub brush (cut for the purpose) was placed upright in the holes in the cinder blocks. This device served to give a realistic impression of cover without obscuring the view of the spectators.

Smoke grenades were employed to screen the movement of wounded and the displacement of machine guns. A smoke pot was set into the woods behind the problem area. Occasional shifts in the breeze often added a genuine "haze of battle" to the scene. This, along with distant-fired burst simulators contributed to the narrator's theme that this was an isolated part of a larger engagement going on all around the problem area.

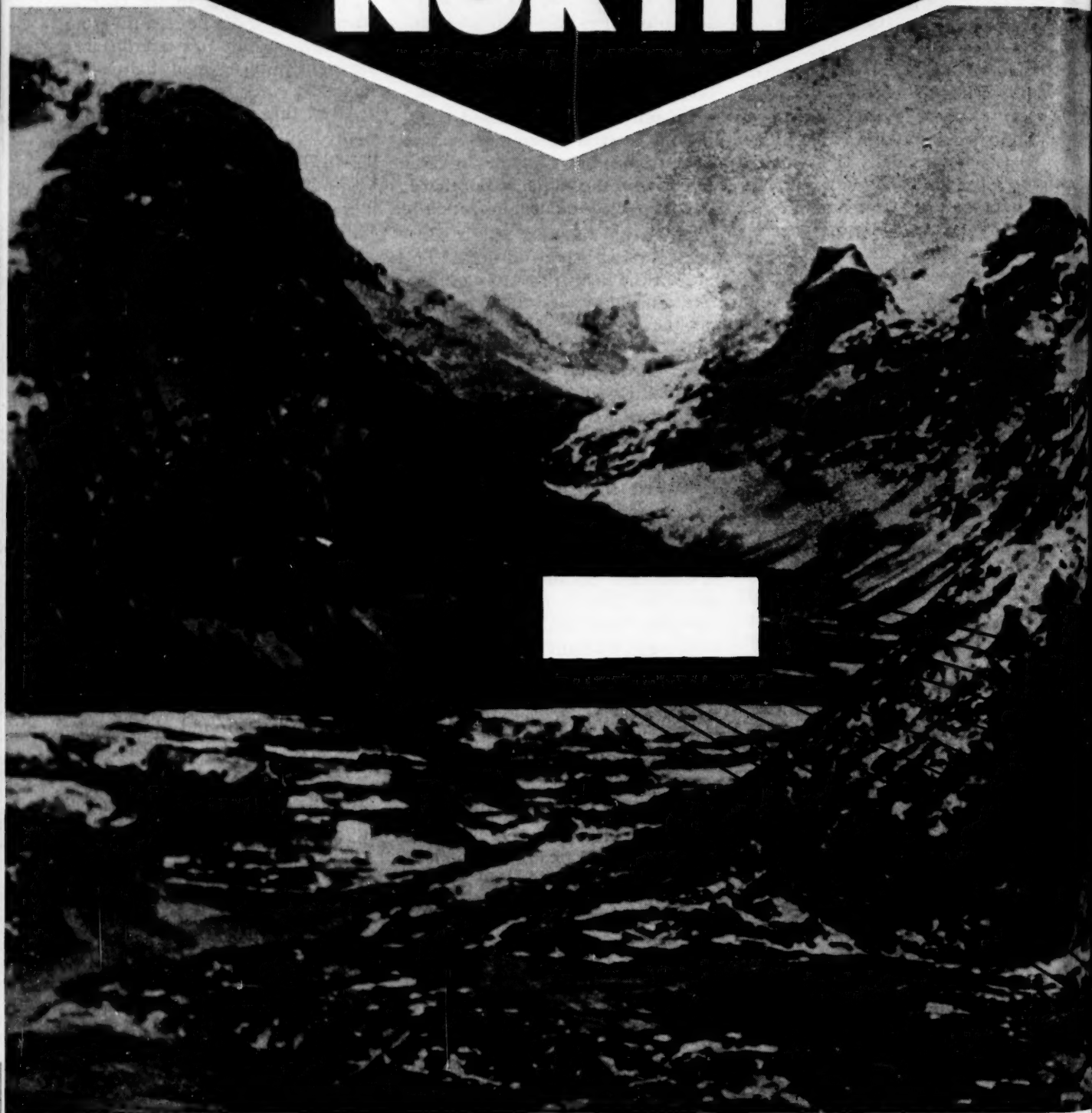
The news of the proposed demonstration had gotten around, and there were more than 600 visitors in the audience. This figure represented a distinct improvement over earlier years. The performance was enthusiastically received. The editor of a local paper asked that the show be repeated in the park of his town and the personnel of Marine Barracks received a hand written "well done" letter from the Commanding Officer of the Station.

The demonstration would have been nothing without the open and eager co-operation of people who were asked for help. But the significant fact of this operation was that no one had asked before. Again, it demonstrated the fact that very little is beyond the grasp of an enthusiastic and enterprising commanding officer.

US MC



# NORTH



Fifteen years ago, two forces were projected against Norway. Great Britain had the dominant seapower but—she lacked an understanding of amphibious warfare, control of the air and the type troops needed in the mountains. The Germans won by default.



AT DAYLIGHT ON 9 APRIL 1940 3 German divisions crossed the Schleswig border to overrun a non-resistant Jutland. Simultaneously 20,000 other Germans, the vanguard of 6 divisions, captured 6 Norwegian ports to begin the first major Allied battle of World War II. Opposed at first only by a small and ridiculously weak Norwegian army, from mid-April on the Germans fought Allied forces in strength. Less than two months later they had won complete control of Norway.

Human nature dictates that a major victory receive a somewhat illogical analysis, at least initially, by the vanquished. The enemy is apt to be credited with more ability than he could ever boast. This error is sometimes made in good faith, sometimes as a political or psychological expedient. But it is generally made, and Norway is no exception.

Shortly after the German landings Mr Churchill told the House: "This crime had, of course, been long and elaborately prepared, and it was actually set in motion in the last week of March." A military scholar writes of the German army in Norway, "The 3 components of the Wehrmacht were as 3 factors in a multiplication problem, visualized and solved from day to day by one competent arithmetician." A US War Department publication states, "The decision in Norway was determined, not by superior valor, but by thorough planning, united leadership, co-ordinated action, swift execution and superiority of material. . . ." A West Point study remarks, "From the German viewpoint the Norwegian campaign was an ex-

hibition of excellent planning and co-ordination of a combined air, land and sea operation."

These evaluations suggest a perfect black-and-white study: a superbly smooth and powerful military machine defeating a confused and inept opponent. But recent publications, by presenting new facts about this campaign, produce nuances of color that shade the earlier picture into a portrait of relativity. More complex conclusions must now be drawn, but the road to them, by necessity, winds first through the wood of events.

Specific German interest in Norway began with Admiral Wegener's treatise, *Naval Strategy in World War*, published in 1929. This work reasoned that for the German navy to make a worthy contribution in any future war it must avoid its insipid World War I role of a fleet-in-being. Both Denmark and Norway were discussed as potential bases for the desired ocean-going fleet. But the German General Staff, restricted to the problem of internal security and to the supposed Polish and French threats, was simply not interested. This did not deter the German navy from studying Wegener's thesis, and it was Grand Admiral Raeder who, in October 1939, discussed with Hitler the occupation of Norway. Raeder, who definitely wanted the long protected coast for his submarines, also regarded the move as a necessary defensive meas-

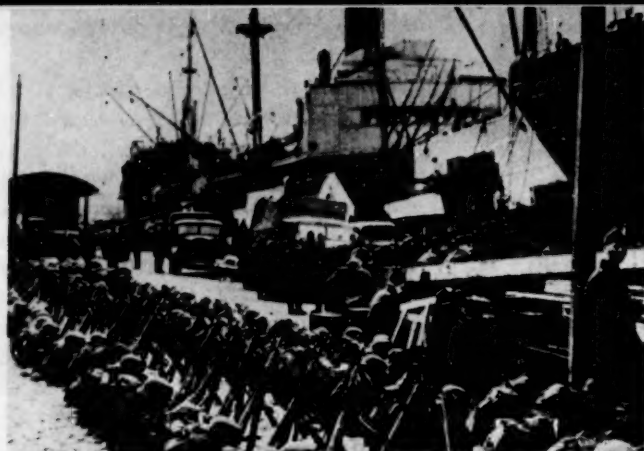
ure. One of Raeder's officers, Captain Kurt Assmann, writes that "the Naval Staff considered that the loss of Norway to England would be synonymous with losing the war." It would bring Sweden under English influence, would interrupt Swedish ore shipments to Germany, would threaten German sea lanes in the Baltic and would open Germany to intense air attacks by the English. It was true, that to occupy Norway by force would require large ground forces and all of the navy. The action, itself, would not conceivably be condoned under international law. But at the same time, England would undoubtedly either occupy Norway or violate her neutrality in prosecution of naval warfare against Germany. Thus Germany should prepare for an occupation, but should wait until England was about to act.

In December, the Norwegian Vidkin Quisling visited Hitler to suggest a bloodless invasion. While Hitler put little stock in this, he apparently was impressed with Quisling's allegations that British intervention in Norway was imminent, for Raeder had been saying the same thing for some months. Hitler now directed preliminary planning to begin. Operation *Weseruebung* was born!

Raeder's estimate was fairly accurate. Norway constituted the major leak in a naval blockade of Germany. The inland passage of her western coast stretching 800 miles from Tromsö south to Stavanger—the famous Leads—allowed German shipping a safe route through neutral waters besides access to the northern port of Narvik where vital Swedish ore could be brought for







**Forces in readiness could be held back no longer . . .**

shipment when the Baltic port of Lulea was ice-bound. English economic experts estimated that the loss of Swedish ore would bring Germany to one-sixth of her pre-war imports. If Narvik alone were cut off, the ensuing loss would be an estimated one million tons of ore over a 4-month period which "would certainly mean acute industrial embarrassment."

Churchill's suggestion early in the war that the Leads be either mined or patrolled was rejected by the Cabinet as too likely to provoke Germany into a more active war. But France, desiring nothing so much as battle away from her border, argued for direct action. A joint plan was finally evolved: troops would be sent to the aid of Finland via Norway where they would simultaneously occupy the orefields and four Norwegian ports. The British Chiefs of Staff considered this plan "the first and best chance of wresting the initiative and . . . shortening the war." Troops were actually embarked at the end of February 1940, but the Finnish surrender two weeks later negated any excuse to land troops in Norway. The operation was thus cancelled.

In early February, according to the German historian, Walter Görnitz, "Hitler finally abandoned the idea of carrying out his western offensive during the winter and began increasingly to occupy himself with the Norwegian project." In mid-February the *Altmark* incident—a British destroyer entering Stavenger waters to remove British prisoners from a German ship—hastened German planning. Further indications of direct Allied intervention caused Raeder, on 9 March, to advise Hitler the operation should begin. But on 26 March, because of the

Finnish peace, Raeder advised that a British landing was no longer imminent. However, the German fleet could not be held in readiness any longer without sacrificing the most vital element of surprise. If the landing were to be made, it should be now. Hitler ordered D-day on 9 April.

On 21 March, however, Reynaud had taken over in France and had at once demanded action. England agreed; the result was Operation *Wilfred* a mine-laying project of the Leads to be supported by landings if Germany were provoked into invasion. On 5 April, after an unfortunate delay and when German supply ships were already at sea, Sweden and Norway were handed Allied diplomatic notes protesting the obvious advantage of their neutrality to Germany. On 7 April Allied troops were embarked aboard ship. Early the next day the British Government announced the laying of three minefields in Norwegian waters. Norway protested and at once assumed patrol of the fields, only one of which really existed.

On 8 April one of the British destroyers engaged in the mining had fallen back to search for a man overboard and was sunk by German ships. She managed to send off a warning. At noon that day a Polish submarine sank a German transport off Bergen. Among its survivors were German soldiers who admitted the impending operation. Late that evening the British battleship *Renown*, patrolling to the north, sighted the *Scharnhorst* and *Gneisenau* and was able to damage the latter ship. It now being obvious that a major enemy force was at sea, the



**. . . the advanced elements were already at sea**

Admiralty decided somewhat arbitrarily to seek a naval decision before becoming involved in a land imbroglio. Troops already aboard cruisers were hurriedly put ashore so that the ships could join others steaming from Scapa Flow.

With one exception the German landings (see map, p 42) were hotly contested by the understrength Norwegian garrisons. The Narvik commander, Colonel Sundler, was a follower of Quisling; he refused to fight. But the Kristiansund garrison sank a light cruiser before being overrun; the Oslofjord forts sank a heavy cruiser and damaged a light one. Despite an airborne assault of 3,000 troops at Fornebu airfield on the outskirts of Oslo, the city was not taken until noon which allowed the King and most of the Parliament to escape north. Subsequent German demands for a Quisling Government were refused, the Germans being told "resistance would continue as far as possible."

Once the German hand was tipped the British acted. On 10 April, 4 destroyers attacked Narvik where 10 enemy destroyers were refuelling. The British sank 7 merchant ships and 2 destroyers. Three days later a stronger force continued the Narvik attack to sink the remaining 8 destroyers. The crews of the latter, about 2,000 men, escaped to reinforce the garrison.

But German air power, by confining British action to the north, opened the south to land gains. By 15 April the Oslo area was secured; a week later traffic re-opened between Oslo, Stavenger and Kristiansund. German spearheads now attacked north out of Oslo up the



**D plus 6 — northward out of Oslo**

Gubrandsdal and Osterdal valleys where in the northern reaches Norwegian units were desperately establishing make-shift defenses.

Additional Allied counter-measures were taken by air and sea. But poor weather, poor maps and superior enemy air frustrated bombing attacks. In one month Bomber Command lost 27 aircraft—at a time when the total availability, including those in France, was 216 machines. Mines dropped by air and sowed by submarines produced better results: from 13 April until the end of the campaign German troop transportation was diverted to the railway through Jutland and the shorter sea passage across the Skagerrak.

On land the Allies decided to make Narvik the immediate objective (see map, p 42). But as early as 12 April, plans for a southern landing, particularly at Trondheim, had been under discussion. Two landings were eventually agreed upon, the upshot being that before the Narvik operation had really gotten under way, much of its intended strength was diverted south. On 14 April, 150 Marines and sailors landed at Namsos followed by a brigade 2

days later. This force was to attack south against Trondheim. On 17 April a naval reconnaissance party landed at Molde and Aandsnes followed a day later by a brigade. This force was to close the pincers by attacking north against Trondheim. Unfortunately Norwegian resistance further south in the Gubrandsdal was crumbling, and part of the latter force was immediately thrown into this area. The initial success of these landings coupled with the naval victory at Narvik a few days earlier now caused the proposed landing at Trondheim to be shelved as an unnecessary risk of the fleet in confined waters commanded by German air.

The southern success was short lived. Beginning on 20 April, German air systematically eliminated the bases at Namsos, Molde and Aandsnes. On 22 April the Namsos force reached Steinkjer only to have its right flank hit from the fjord by German torpedo craft. At the same time a German force landed behind it to threaten its rear. One day later Allied defeat in this area was a fact. Farther south ineffectual Norwegian resistance supplemented by inadequate British forces was unable to halt the smoothly meshed ground-air enemy offensive. By 25 April the entire situation had deteriorated so badly that evacuation of central Norway was ordered. On 3 May the last unit had been taken aboard ship. There now remained Narvik.

The Narvik operation was under joint army-navy command which from the beginning held opposite views. Admiral of the Fleet Lord Cork, emboldened by the recent naval success and realizing the urgency of the situation, wanted to take Narvik by "the quickest rather

than the most economical means," i.e. an assault landing against Narvik at the earliest possible moment. Major General Mackesy disagreed. His brigade had arrived at Harstad, a small port in the Lofoten Islands, in cargo—rather than combat-loaded ships. He had no artillery, little mortar ammunition and no landing craft, nor were his troops trained or equipped for operations in heavy snow and freezing weather. On 20 April he informed London that "any attempt of the sort [an assault landing] would involve not the neutralization but the destruction of the 24th Brigade."

Instead Mackesy landed his troops north and south of Narvik, the former to tie in with Norwegian forces fighting in the northeast. On 24 April a Norwegian attack from the northeast failed with one battalion lost to the enemy. On 28 April French and Norwegian forces again attacked from the north while a British force landed south of Narvik to establish a defensive line from the coast southeast to Lake Stovatn. The attack soon bogged down; the northern group advanced only 5 miles in 10 days.

By now the southern evacuation enabled the enemy to concert forces for an attack north to relieve the Narvik garrison. To counter this, Bodö was garrisoned by the Allies with 5 newly formed Independent Companies later reinforced by the 24th Brigade from Narvik. Lighter forces were sent further south to Mosjøen.

Lord Cork, after becoming Supreme Commander on 3 May, ordered an assault on Narvik, but postponed it to wait both the availability of Bardufoss airfield under construction northeast of Narvik and the arrival of General Auchin-

**A British brigade lands at Namsos but is . . .**



Marine Corps Gazette • April 1955

Wide World

**. . . no match for a co-ordinated air-ground offensive**







**Land-based airpower negated British control of the sea**

leck, the new ground commander.

On 10 May the enemy, in a difficult and daring maneuver, landed 300 troops by coastal steamer at a village 15 miles west of Mo. This caused the outflanked Mosjøen garrison to evacuate north; a stand was made at Mo. By now almost constant daylight allowed maximum enemy air support. Mo fell on 18 May.

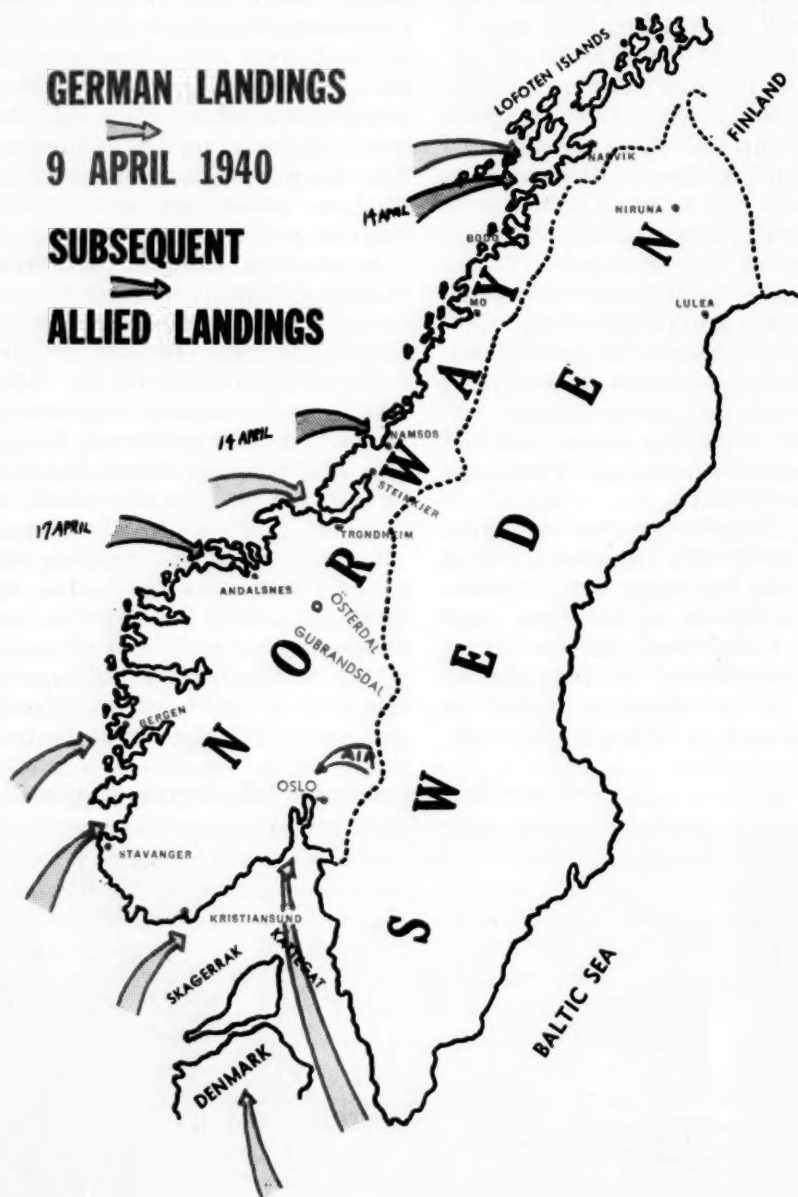
Attempts to reinforce Bodö, the last stronghold, had been frustrated by enemy air which sank one cruiser while another cruiser had run aground on a shoal. In both cases the troops aboard were saved but not the majority of equipment. By the time these forces arrived piecemeal at Bodö the decision to evacuate Norway had been made.

Remember that the western offen-

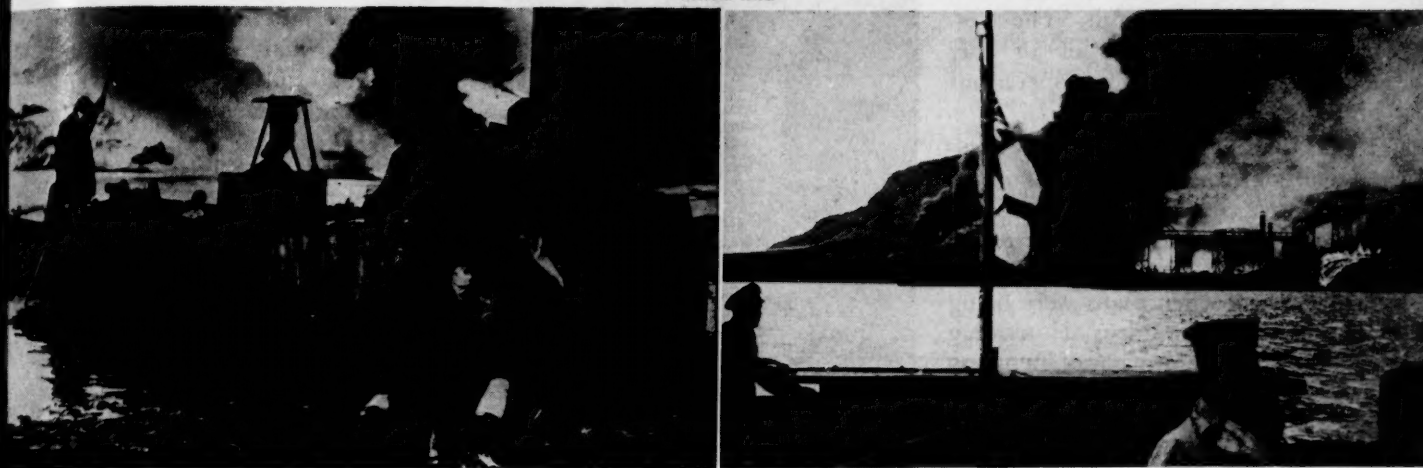
sive which began on 10 May could not fail to influence the Norwegian situation. The battle not only for a main decision but for England's own survival had begun. Every man, ship, gun and plane were needed either at home or in France. The Government agreed that Narvik was not essential as a naval base and that its retention would serve little more than a drain on resources that scarcely existed. In view of the western battle, additional forces and materiel could not be committed to Norway. Without these General Auchinleck could not fight the prolonged campaign he had been sent to fight. One answer existed to the impasse, and on 24 May the Government gave it: capture and destroy Narvik, then evacuate as quickly as possible.

The attack began at midnight on 27 May by French, Polish and Norwegian forces, British troops having been sent to the Mo defense. At H-20 minutes, 3 cruisers and 5 destroyers commenced firing at the steep beaches west of the town. Landing craft consisted of three ALCs and two MLCs which allowed only one wave of 290 troops to be landed across the Rombaksfjord every 45 minutes. By 0400 two battalions were ashore and shortly after successfully repulsed a German counterattack. Simultaneous with the landing, other units attacked from the north and south. The first Allied troops arrived in Narvik at 1700 that evening. By the next morning the victory was consolidated at a total cost of 150 casualties. About 400 prisoners were taken.

Evacuation followed almost immediately. The Bodö force sailed on 30 May. On 7 June the last of the Narvik force went aboard ship—25,000 troops plus prisoners, artillery, ammunition and aircraft. A final disaster occurred the next day when a German naval force engaged in Operation *Juno*—an attempt to disrupt Allied shipping in Narvik waters—stumbled on elements of the evacuating convoys. After several smaller ships had been sunk, the British carrier, the *Glorious*, escorted by two destroyers was hit by the *Scharnhorst*. One hour later she sank. Both destroyers also went down, but not until one put a tor-







Incursions were followed by evacuation after evacuation . . . until the last Allied forces had been driven from Norway

pedo in the *Scharnhorst*.

Thus ended the Norwegian campaign. While personnel losses were not great when considering the magnitude of the fight and when compared to later losses, still the Germans admitted 5,000 casualties, a figure more than one observer has raised to the 30-35,000 mark. Excluding Norwegian prisoners and the 1,500 men lost on the *Glorious*, the Allies admit 3,700 (1,869 British, 530 French-Polish, 1,335 Norwegian). German materiel losses on land were small. Although 234 aircraft were expended—one-third of them transports—this meant little in view of their preponderant air strength. The Allies, particularly the British, suffered a heavy materiel loss mainly because of three evacuations. Further, with military stocks in short supply and a crisis rapidly approaching, any loss such as the relatively few aircraft destroyed, assumed an importance not readily conveyed by numbers. The naval losses are another story. The Allies expended 1 carrier, 2 cruisers, 9 destroyers and 4 submarines. But Germany's fleet, including merchant shipping, was vastly reduced. At Narvik, alone, she lost over half of her total destroyer force. Both battleships were put out of action for long periods and 3 cruisers were sunk.

The relatively heavy naval losses are explained by the nature of the ground operations. The Allies, despite initial intentions, could fight little more than a holding action. Not once was there allowed a major land battle. On the few occasions the southern forces met the enemy, the former's strength was rarely, if

ever, above battalion level and generally on company or platoon level, and they almost immediately were forced to withdraw. The only Allied ground victory, and one not surprising in view of the superior local strength, was at Narvik. At sea, however, the Allies managed one major action besides actively supporting land operations which meant sailing in confined waters generally dominated by enemy air. So long as naval action remained in the north, away from mass enemy air attack, the Allies fared better than the enemy.

That the Allies were defeated can not be doubted, but this defeat does not necessarily constitute a smashing German victory. The alleged glitter of the German offensive is somewhat tarnished by Allied ability to fight a ground war. To place the Italian army against the Ethiopians proves only the weakness of the latter, not the excellence of the former. And in the case of Norway, to make Germany a victor unparalleled in warfare is to make a mountain out of a mountebank!

The German position is to be more honestly judged in the light of her opponents' major errors. Contrary to the German Naval Staff's belief, the British Chiefs of Staff believed "that access to Norwegian resources was more important to Germany than to Britain." Thus the underlying concept called for preventive action. But what had not been considered was the political attitude of Norway, a country in ideological sympathy to England, but one that had grown increasingly suspicious of the West from the time of Hitler's first *démarche*. Mr

Churchill complains that "if the Norwegian Government had not been so very strict and severe in enforcing their neutrality against us and in leaving their corridor open to German operations . . . it would have been very easy to give them more timely and more opportune support. . . ." But what England would not honestly face was Norway's fetish for neutrality. Instead of diplomatically preparing her for British intervention or, failing in that, declaring her a military necessity—either take her or leave her alone—England resolved to act by subterfuge. The Finish peace having negated this move, she then chose the mining operation, an effective plan if carried out at once. But delay allowed the German action to transpire and with it any further opportunity for surprise. Sir Francis Drake had long ago bequeathed an appropriate warning to his country: "Time . . . is half a victory, which being lost is irrecoverable."

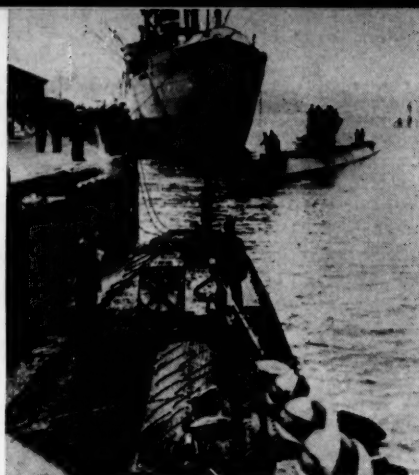
There ensued a reasonably concrete military situation; like any other it featured facets for exploitation. England originally wished to neutralize the orefields and Narvik, an area outside the sphere of enemy air. She could undoubtedly have successfully assaulted Narvik by 12 April. Instead, vacillation reigned; she split her force to go south, ostensibly to take Trondheim which the enemy admits could have been taken during the first few days. But here she chose a course of luxurious flanking attack when time could only allow the more difficult frontal assault. Beaten, driven out of central Norway, she again turned north.

Time had now run out. The German western offensive of 10 May spelled an end to Allied operations in Norway.

England held almost no intelligence on Norway. It is inexcusable that after the Russo-Finnish war catapulted Norway into the strategic spotlight, still no information was sought even when plans were being made for her occupation. No wonder the planning was inept; no wonder realistic planning was not attempted, as charged by one British commander, because of a basic assumption "that what the General Staff consider to be politically or operationally desirable is administratively possible." This explains the assignment of four brigades that, in Churchill's description, "lacked aircraft, antiaircraft guns, antitank guns, tanks, transport and training. The whole of northern Norway was covered with snow to depths which none of our soldiers had ever seen, felt or imagined. There were neither snowshoes nor skis—still less skiers."

The miracle of Norway is not the German campaign; it is rather that the Allies escaped annihilation. The why of their escape lies with the enemy, the enemy who 5 years later was to be cracked open like an egg shell. It is this enemy who in 1940, in Norway, displayed the weaknesses that led to dissolution in 1945!

When Raeder first discussed the Norwegian operation with Hitler, the latter had definitely decided to invade England if she did not capitulate after the forthcoming German offensive into France. Much of the success of an English invasion would obviously depend on the small but powerful German navy. Raeder, even while favoring the Norwegian operation under certain conditions, held no illusions as to the danger to his fleet. The General Staff bluntly advised Hitler that the operation "would be impossible if it involved the commitment of large forces which had in this case to be transported by sea." Hitler answered the latter objection by ordering the General Staff's rival, the senior OKW (*Oberkommando der Wehrmacht*), to plan the campaign. Colonel General von Falkenhorst was given the theater command. By this decision, one seconded by Raeder, Hitler assured at least partial destruction of



**German navy—overtaxed**

his fleet; as it turned out the Naval Staff later admitted that the German fleet suffered "very heavy losses never made up." Because of this loss, Churchill could later conclude that the German navy was "no factor in the supreme issue of the Battle of Britain."

Once decided upon, Operation *Weseruebung* was planned in a somewhat haphazard fashion. First, to entrust it to the OKW rather than the General Staff was to not only call in another team but, by so doing, cement a rupture with the first team which had been pending for some time. Second, the delay. In February, 1940, at a time when the Allies were actually loading troops aboard ship, German planning had but begun. According to Görlitz, "plans had never been made for a campaign in Denmark or Norway, and the necessary maps had to be got together from Berlin bookshops—a very tricky business considering the secrecy that had to be preserved." Yet so thoroughly did Hitler alienate the General Staff that secrecy was not preserved; Görlitz bluntly states "when Admiral Canaris in his fanatical determination to cut across every plan of Hitler's, tried to warn them

[the Danish and Norwegian military attaches] of what was intended, he encountered crude incredulity. The attaches thought such warning was a feint. Sweden alone became suspicious, her apprehensions being aroused when Swedish diplomats heard of the massing of transports at Stettin."

In view of the diversified targets and extended lines of communication, logistic planning called for an extraordinary ability which was not exhibited. Supply ships were ordered to proceed ahead and independently of the troops who were embarked on faster warships, there being a lack of transports. Only 6 days were allowed for the supply ships to reach their destinations, and this was not long enough. None of the 7 steamers, disguised as normal merchant ships, arrived on schedule. At Narvik only one tanker (from Murmansk) arrived on time. Thus the battle group of 10 destroyers could not at once refuel and return to Germany, as had been planned, and it was these 10 ships that were sunk *in toto* a few days later.

The Oslo landing was to be reinforced within 4 days by 2 divisions including 4,000 horses, 10,000 vehicles and 40,000 tons of supplies. Until the large transports arrived, the spearhead could not be thrown forward, and it was this delay that allowed the Norwegians and Allies to defend in the south at all. If Oslo could not at first be supplied by sea, the Trondheim and Narvik garrisons could scarcely expect seaborne aid. Only two days after the Narvik landing the supply situation necessitated the opening of an air drop that was to continue throughout the campaign. Indeed, the situation almost immediately became so dif-

**Von Falkenhorst and his mountain troops commander, Dietl**





difficult that the problem emerged not as one of *jointure* with the Narvik and Trondheim garrisons, but rather of *relief*. On 21 April 1940 William Shirer wrote, "A friend of mine in the High (German) Command tells me that the whole issue in Norway hangs now on the battle for Trondheim. If the Allies take it they save Norway, or at least the northern half of it. What the Germans fear most, I gather, is that the British Navy will get into Trondheim Fjord and wipe out the garrison in the city, before the Nazi forces from Oslo can possibly get there. If it does, the German gamble is lost." And a German naval officer adds, "for the Allies the reconquest of Narvik had priority over operations in central Norway, but the opposite applied to the Germans, who in the event of losing the Trondheim area could not expect to hold Narvik."

Perhaps the most decisive aspect of the campaign was the inordinate effect of air power. Strategically, it negated British control of at least part of the sea for the first time in several centuries. Tactically, German air "influenced the battle by reconnaissance activities, by bombing and machine gunning and even by the mere threat of their presence; our lines of communication were at their mercy; and they put two of our bases virtually out of action." Yet this singular air strength utterly failed to impede 3 large scale evacuations, a failure explained in part by Air General Kessler who offers perhaps the genesis of the apparently enduring strategic vs tactical air argument: "General von Falkenhorst asked me how I thought the air forces could give maximum support to [General] Dietl at Narvik. I answered, by keeping away the British Navy and, most of all, British aircraft carriers. This statement was interpreted by von Falkenhorst that I refused to help the Army at all. His idea was that the air forces should give close support only. . . ."

Despite the alleged miracle of unity in German command, certain shortcomings in fact existed. Unity without the polished brains of the General Staff is certainly a distorted kind of unity. On the local scene, individual naval group commanders were circumscribed in freedom of action by orders from the Naval Staff

acting under the supreme OKW command. The coastal defenses of Norway fell under naval command and were given priority over land operations, a situation Assmann describes as a "constant source of friction between the Army and the Navy." Nor was the theater commander, according to Kessler, a symbol of unity: "*De jure*, von Falkenhorst was in command of all land, air and naval forces used in the occupation of Norway. *De facto*, nothing resembling a supreme command of the United Services came into existence . . . Falkenhorst had no training in a universal conception of warfare nor was he the personality to live up to the task of a Commander-in-Chief of the Army, Navy and Air Forces. He remained an Army commander and with a respect of strategy confined to ground operations."

Perhaps the most illuminating of all reactions is at the top, for here, according to Görlitz, is Hitler opening the curtain on a behaviour play that was to close in Berlin bunkers. Jodl now learned something of the meaning of Hitler's bad nerves and of his complete inability to control himself. Laconic entries in his diary, such as 'excitement terrible,' and the single word '*Fuehrungschaos*' (chaos in command) testify to the nature of the effect on Hitler of the continuous bad news [from Norway]. It was only with difficulty that Jodl

persuaded his Supreme War Lord not to abandon the whole venture."

A fitting finis to the German campaign is provided by a political defeat. Although Hitler wished desperately to win Norway to the pan-Germanic fold, in his contradictory fashion he installed a typical Nazi strong-arm man as Reichs Kommissar. Herr Terboven not only failed to win over Norway, but he failed to maintain even a state of surly passivity. Thanks to his policy, a brutal one, Norway became and remained a thorn in the enemy's flank.

Rising, colossus-like, above any ledger of victory or defeat is a single lesson bequeathed by this campaign to a Free World. It is a lesson solely of preparedness. We have seen that the Germany of 1940 held weaknesses plentiful and severe, but by employment of the initiative and of deception and above all by *western weakness* she was able to make vast initial gains. Our enemy today, certain observers to the contrary, also holds weaknesses plentiful and severe. And she exercises the initiative, and she is a master of deception. And where once initial gains did not mean final victory, now in the day of the hydrogen bomb such gains may very well prove decisive. That is what lends immortality to David Lloyd George's warning: "Never again must we be too little and too late!"

US MC

### ***Efficient ground operations did not reflect high-level confusion***





READY FOR

# FEAR?



It's human nature to fear the unknown—be forewarned against the most demoralizing element of combat action

By LtCol L. E. Hudgins, Jr.

✿ A MARINE WHO HAS EXPERIENCED any action against the enemy has experienced fear. If he is honest he will tell you that he's been scared many times. This fear is natural. He has lived with certain fears all his life. As a child he feared darkness, fire, closed places, high places and a host of others. During his growing-up period these fears changed to maybe the ocean, boats, racing cars, ridicule, gossip, dancing and even girls. When he joins the Marine Corps he encounters a number of new fears, varying in intensity, from "Will I like my officers?" "Will I act like a coward in battle?" to his most important "Will I get through this alive?"

Combat Marines will tell you that this fear is natural and expresses itself in different ways. Just prior to an attack the infantryman will adjust his sights and adjust them again. He will count his grenades and count them again. His breast will pound so heavily that it feels like his heart is coming through his chest. His throat is dry, he can't swallow and there is a tenseness in his arms and legs. Sometimes there is a trembling that is almost uncontrollable. These symptoms combined with sweaty palms and forehead, a nauseated stomach, coupled with an intense desire to urinate are all common signs of fear.

These external signals vary from one Marine to another, but all com-

bat men who wear stars on their campaign ribbons have experienced them. But a certain amount of fear is good for the combat Marine.

Doctors tell us that fear, just at its height immediately prior to combat, is nature's way of preparing the body for battle.

Your heart pounds faster, thus passing more needed oxygen to your brain and limbs. Lungs assist in increasing the oxygen and you find yourself breathing faster. Adrenalin, a powerful stimulant in the body, is poured directly into your blood stream. Your blood at this time will clot more quickly and, if you have been tired, you find yourself with renewed energy. Your muscles tense up and you're automatically in a crouch, presenting a smaller target to the enemy. Even the pupils of your eyes become dilated to better see the enemy, and finally even pain sensations are reduced, explaining why many men have been hit and didn't realize it until after the action.

That fear is at its height just before battle, is explained by the fact that it is human nature to fear the unknown, for the unknown is usually expected to be worse than it is. Once the action is begun the individual can do something to counter it. Undoubtedly, the most demoralizing fear is during that time in which you find yourself in a position

unable to do anything against the enemy.

This situation temporarily disheartened the 1st MarDiv on Guadalcanal during WWII. On the night of 13-14 October 1942, the enemy, after having delivered a pulverizing afternoon bomber raid which sent nearly all planes and aviation fuel up in smoke, began firing his newly arrived 155mm guns on the airfield area. Vandegrift had no counter-battery weapons to silence them, so all hands took it. Shortly after midnight a Jap battleship force stood off and for nearly 2 hours accurately and methodically chewed up the airfield and everything near it. Again nothing to do but take it. The following night a Jap task force again bombarded the area and after a sleepless night Marines gloomily greeted the dawn and from the ridges watched 4 Jap transports unloading men and supplies some 10 miles away. At this moment the inability to take action against the enemy probably marked the low point of the Division's morale during the campaign. It was not until 3 patched up SBDs struggled off the strip and struck the unloading transports that the troops took heart.

If fear is natural, what does the commander do to keep the fear reactions of his unit within bounds—within those bounds that will prevent cowardice (submission to fear) and kindle courage (overcoming





fear) so that his unit may accomplish its mission?

For troops to understand that fear is something which almost all men experience in combat, and the effects which it may be expected to have on their efficiency, will relieve much of the anxiety in battle. By the same token a permissive attitude toward the discussion of fear should be adopted so that such discussions are not cause for additional anxiety.

The leader must understand the subject thoroughly and with the assistance of his small unit leaders he must impart this knowledge of fear to his men and prepare them for conquering it when it strikes.

Experts in the field of psychiatry tell us there are 5 over-all principles the troop leader can use in keeping fear reactions among his troops to a minimum. These are all closely tied in with the principles of good leadership.

#### Removing Personal Problems

Personal problems preying on an individual's mind make him ripe for fatigue and vulnerable to fears. A man troubled with sickness in his family, dissension in his home, or plagued with money worries is not as emotionally stable as his fellow Marine without these added burdens.

The leader sees to it that he is the first person to whom a man might turn in case of trouble. He should talk to his men about their private lives in a manner that does not appear to be invading their privacy. Soon the various things that are bothering him will come to the surface. That is when the leader can take action to either help him or point out where he can find help. Often the simple solution of inform-

ing him of dependents' care in the hospital, escorting him to the Navy Relief office or helping him prepare emergency leave papers will not only solve his most urgent problem but make him feel that the Corps is not a gigantic machine, but composed of leaders that do take an interest in his troubles.

Sometimes overlooked during the heat of preparing a unit for movement overseas is time off for men to take care of personal problems. Problems of a personal nature are paramount in a man's mind. To move out with all these matters provided for, as best he can, reassures an individual and leaves his mind stronger for the tensions and stresses ahead.

#### Develop a Team Spirit

Here the Marine Corps is fortunate. Because of its size, team spirit is more easily developed than among the larger services. The Marine is imbued in his boot training with the idea that the Marine Corps is an elite team with 179 years of proud tradition to back him up.

However, this team spirit must be kept alive, and more important, it must be developed on a level closer to the individual.

Platoon and company competitions are sure-fire methods of developing team spirit. Whenever a member of the platoon is in the hospital the whole platoon should know about it and visit him—the platoon leader first! Whenever the company engages in athletic competition the whole company should fall out and cheer their team on.

Building this team spirit is aimed at instilling in the individual Marine the idea that the safety and achievements of the unit is more im-

portant than the safety and achievements of the individual. This spirit of "I won't let the guys down" properly engendered during training, will prevail against his fears later when pep talks, threats and flag-waving fail.

We see evidences of team spirit every day. A Marine proudly wearing his blues on liberty. The 5th and 6th Marines with their fourragere. The growl of an old timer when he welcomes a replacement with, "You're in the *first* battalion now, bub."

Team spirit can also be encouraged and fostered by talks of the commanding officer to the command. That able and wise WWII leader, LtGen Pedro A. del Valle, who, as a colonel, addressed his new command, the 11th Marines:

"Every one knows the Marines are the best fighting troops in the world," he said. "They also know that the 1st Marine Division is the best Marine division. And you and I know that the best Marine regiment in this division is the 11th Marines. That makes us the best regiment in the world."

There wasn't an officer or man within hearing that wasn't convinced that they were indeed the best team on earth. Team spirit? The 11th had it when del Valle was their commander.

#### Discipline

Contrary to popular belief, discipline is not all saluting, appearance, parading or doing what the casual observer might deduce as being a "sharp Marine." More important is the proper mental attitude which causes an individual to understand the necessity for obedience and have a firm desire to comply. This was brought out in a recent talk by Adm Carney speaking to a group of Navy officers:

"I have served in many ships in which the need for discipline was understood by all hands from top to bottom . . . where an order was obeyed with alacrity and without question because of a great mutual confidence that existed among the members of the ships' companies . . . and those ships were inevitably proud and happy organizations in which serious breaches of discipline were almost unknown."



And how do we help develop this proper mental outlook in the individual Marine?

At every opportunity during the early stages of a Marine's career the importance of obedience and what it means not only to himself but to the unit should be explained. During training exercises, during breaks on marches, when aboard ship, we should explain briefly before giving the order the reason *why* he must move out quickly, *why* he is on a flank patrol, *why* he must use the vertical strands.

It is important, most especially during the training stage, that the *why* be explained and explained again so that real discipline is instilled into the Marine. So often many leaders, veterans of countless maneuvers and campaigns, fail to realize that these neophyte Marines haven't had the benefit of their patient teachers, their experience on maneuvers, their confidence of combat. Young Marines must be continuously taught.

#### Developing Confidence in the Individual and Team

One excellent principle involved in lessening fear reactions is the developing of confidence. This confidence is built in many ways and it is first engendered in boot camp. There the recruit goes through a succession of accomplishments: learning to drill, parade, salute, read a map and fire a rifle. These all build confidence in the new Marine. But these accomplishments should not stop when the Marine has finished his recruit training. Long forced marches, physical drills and vigorous field exercises not only increase the individual's confidence in his professional ability but assure him that he is ready physically, too.

Progressive challenges should be assigned to the Marine so that this feeling of confidence in himself is kept alive and fresh. If he is a corporal try him as a sergeant, if a lieutenant let him run the company next Wednesday, and when he does a good job let him know about it—publicly.

In the same manner men should be given team problems to solve. By repeatedly solving training problems with the same fire team or the same mortar section a man learns that he

can depend on his team. He has a feeling of confidence in his teammates should anything happen to him—a good thing to know when the fire fight is hot.

#### Knowledge of Fear

We conduct communication schools, scout-sniper courses, demolition schools and other specialist courses to make a Marine proficient in battle. Yet what do we do about preparing a Marine mentally for combatting what he's sure to find hovering over his shoulder as he goes into action?

Fear is one of the most important stresses that reduce human efficiency in combat. In order to plan measures to deal with fear in combat, one



needs a clear understanding of what it is.

Preparation for fear should not be left to the minutes or hours just prior to combat. Surely there will be certain individuals temporarily paralyzed or shaken with convulsions, yelling wildly as the unit moves into the attack. These men are indeed the victims of leadership—leadership which procrastinated when it came to acquainting men with this surprise enemy.

One leader while enroute to Inchon with his outfit did do something about it. "I held a class on fear," he said. "I put emphasis on being mentally prepared to accept the blood and guts without surprise. Emphasis was also placed on the recognition that fear was mutual among all. The class shocked many. However, afterwards many stated how valuable the preview had been to them."

The Medical Officer can also help. If requested he can make a surprisingly good talk on the physiological effects of fear, its normalcy in times of danger and the effect that extreme fear has on the *thinking* processes.

Discussions of fear should also be

conducted by small unit leaders, perhaps during inclement weather in lieu of the usual refresher on map or compass reading. These discussions should again stress the natural emotions of being scared, the symptoms to be expected and experiences of veterans on how they overcame their fears during combat. Veterans command respect on this subject and men will readily accept their ideas.

This is brought out in a vignette in *Semper Fidelis* entitled *The Difference* by TSgt Mort Walker who tells the story of a young 18-year-old Marine visibly worried over the prospect of hitting the beach at Guam the following morning. A veteran sergeant moves up alongside him near the rail and puts a protective arm on his shoulder.

"Y'know, I'm scared, kid—it's a big show."

"You scared, Sarge?"

"Sure, scareder'n anything! It's always this way. Hands shake, belly feels funny—can't help it. Wish I could, but I can't."

"I . . . I feel it, too."

"There isn't a man aboard that don't, kid—or else he's lying if he says different."

"They all afraid, Sarge?"

"Afraid? No, kid, scared. Lots of difference. A man that's afraid would want to quit, now, without tackling the job. A man that's scared—he kind of wishes it was over and he was cleaning his rifle, but he's going to stick it out. Y'see?"

"Yeah, Sarge. Guess I'm just scared."

"Sure, kid." The big hand closed on the kid's shoulder again.

"Let's go check your bazooka again."

They strode across the deck together.

Up to now we have discussed some of the ways of combatting fear during the training stage until the time when the helicopters or boats are boarded for the dash to the beach. As we move inland, tension increases and fears mount in direct proportion to the nearness of the enemy. Here we must leave the techniques of overcoming fear to the small unit leader. He will have to take the immediate action when fear crises arise.

Experiences of small unit leaders during WWII and the recent Ko-

rean action indicate that the following are effective in combatting fear and relieving tension:

1. *Keep busy.* During periods when either awaiting an attack or waiting to jump-off, men are prone to be more scared than at any other time. Cleaning weapons, counting rounds, refilling sand bags, repairing wire are all useful in fighting fear with work. A busy man doesn't have time to be too scared.

2. *Dispel loneliness.* If at all possible keep men within sight and within conversation distance of each other. No man feels as lonesome as a rifleman awaiting the enemy. He is convinced that he is the only Marine left on the entire line and the whole enemy battalion is headed straight for him. This is the time to pass some word, any word will do (conditions permitting), to give a man a chance to hear the voices on either side of him. Frequent personal visits by the squad leader to each man will flood him with reassurance and relieve his anxiety.

3. *Keep men informed.* Nothing is feared worse than the unknown. The platoon leader can reduce tension by telling his men what he knows of the tactics and weapons of the imminent enemy. He can also again point out what friendly units are on the flanks and what units are to the rear. (Any reference to the rear at this time is sure to bring forth a tension breaker.) If he has not already done so the leader should point out to his men *how scared the enemy is* at this point.

4. *Be optimistic.* It has been said that one optimistic fighter is worth 3 pessimistic soldiers. The leader should keep the tone of his oral assurances positive and optimistic. "We're gonna kick these gooks right square in the teeth and chase 'em back to Manchuria" not, "I hope all you guys pull through this okay."

During the see-saw fighting to cross Suicide Creek on New Britain during WWII, TSgt Asa C. Bordages gives us this picture of optimism:

There was a boy firing from behind a log. His face was gray. He stopped firing and looked around. His eyes were dull, without hope.

"It didn't do any good," he said. His voice was flat. He wasn't speaking to anybody. He was just saying it. "I got 3 of 'em, but it don't do any good."



Platoon Sergeant Casimir Polakowski—known as Ski—said, "What the hell are you beefing about? You get paid for it, don't you?"

The kid managed a grin. As Ski crawled on down the line, the boy was again squeezing them off.

5. *Religion calms men.* Often men are able to derive much calmness from prayer and those that do should be encouraged to use this to quiet their fears. When the situation permits, the presence of a chaplain aids in decreasing anxiety. That religion has a significant following among line Marines is borne out by the increase in "foxhole religion" in direct proportion to the proximity of death. No thinking leader would deny the calming effect of Chaplains as they go about comforting the wounded, reassuring the dying and breeding confidence within the unit.

6. *Statistics are helpful.* Often citing statistics concerning a man's chances of not getting hit will improve his outlook and lessen his anxiety. For instance, to know that of all the Marines engaged in combat during WWII only one out of 35 was killed and one out of 12 was wounded. This indicates to a man his chances of coming through an engagement without being wounded are extremely good and his chances of being killed almost remote.

With the advent of the helicopter for casualty evacuation the knowledge that only 43 minutes elapses between the time a man is hit until he is aboard a waiting hospital ship is comforting indeed.

7. *Humor, the spontaneous tension breaker.* Everything else failing, humor is a certain tension snapper. Numerous, spontaneous humorous incidents have been reported which broke the tension in a unit and allowed the men to regain their thinking processes.

That humor can be injected into a tense situation unintentionally is evidenced by the following from Korea:

Several Marines were on the flank of a heavy Chinese ambush, firing madly into the mob of Reds rushing their positions. All along the road automatic weapons and rifles spat in hurried volleys.

Over the ear shattering noise of firing, bugles blasted, whistles shrieked and the Chinese screamed as they charged.

A Royal Marine commando came squirming up the ditch the Marines were in. Motioning towards the battle, he straightened his beret and observed:

"I say, lads—I believe there's a bit of trouble in the making."

Despite your work at indoctrinating men to fight their fears and employing techniques to keep fear under control, there will be isolated instances of men who succumb. What do you do with these cases?

Remove him immediately from the sight of other men using physical force if necessary. Like courage, panic is contagious. A panicky man deadens morale. He should be considered as much a casualty as a man who has been hit in the leg. He should be evacuated quickly to the aid station where the battalion surgeon can prescribe treatment for him.

A man who has experienced this temporary knockout from fear usually recovers rapidly, the medical experts tell us. "What he needs is medicine to make him sleep for 10 to 12 hours, hot food for several days, light duty for awhile and then he is usually ready to return to his unit," say the doctors.

We must train a Marine completely for battle, to be proficient mentally as well as physically. For if we fail to train him to successfully combat his fears we are as remiss as if we failed to teach him to shoot.

This article is not intended to cover the vast field of fear in battle but to invite your consideration to the need for introducing *your men* to the subject during training and to present certain principles and techniques which will be effective in keeping fear reactions to a minimum and relieving tension when action is imminent.

US MC



## in brief

The 3d Marine Corps Prov Atomic Ex Brig is participating in the atomic tests being conducted as a part of Operation Teapot. The Marine Corps' Test Unit 1, at Camp Pendleton developed some of the concepts involving helioteams in the vertical envelopments tested this year.

The controversy begun by *Of Mortars and Men* (prize winning contest essay last year) is being debated throughout the world. The article, published along with a sound rebuttal in the *Canadian Army Journal*, was also put up for target in the Irish defense journal.



The Convertiplane (below), developed by Bell Aircraft takes off

Bell

The Commandant accepted the ship's bell of the old USS *Henderson* from RAdm J. B. Heffernan at a ceremony held at Henderson Hall, HQMC, last month (above). Named after the 5th Commandant, the "Hendy Maru" as she was called by thousands of Marines was "retired" in 1946 after almost 30 years of faithful service. Dependable, but slow, the "Hendy" made the long trip from Hampton Roads to China twice a year carrying Marines to duty at Asiatic stations. Seeing the troops disembarking with hair stiff and bleached from 90 days of salt water showers and glassy-eyed from watching flying fish during long days at sea, oldtimers used to say, "It's not the duty in China that makes you 'Asiatic' it's the trip back on the 'Hendy Maru.'"

In order to speed the shipment of mail to US forces overseas, the Secretary of Defense has announced that air mail will be sent from military post offices via regularly scheduled commercial airlines.

Fairchild



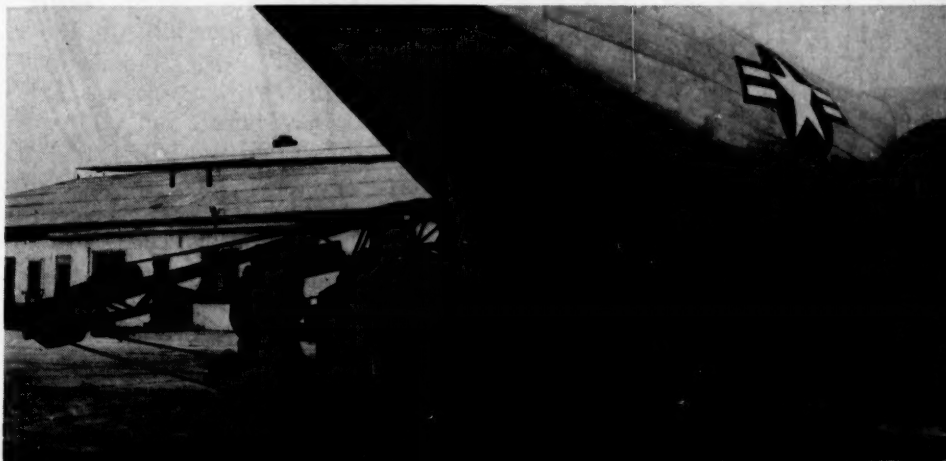
TRAEX 3-55 Marines and the USS *Randall* will be featured in Universal-International's new film, "Away All Boats." The film shots were taken at Vieques during March and will continue into April.

The escort carrier USS *Thetis Bay* will be converted this summer from a fixed-wing type carrier to the Navy's first assault helicopter carrier. All handling gear for conventional aircraft will be removed and troop-carrying facilities enlarged. She will be known as a CVHA.

Being tested at Ft Bragg, the new Fairchild C-123B (right) is shown loading a 15,780 lb. crane shovel into its 38-foot cargo compartment. Designed to airlift personnel, supplies and combat equipment on assault missions or to advanced bases, it can carry 60 combat troops.

vertically like a helicopter and flies forward like a plane.

This month the Navy will commission 3 more former Liberty ships which have been converted into off-shore, radar-station ships. They will have electronics equipment for air and surface search radar and will be a part of the defense screen of the Continental Air Defense Command. These ships are designated YAGR.





You may be *disgruntled* with the promotion system but

here's an officer who presents valid reasons for being . . .

# GRUNTLED

By Col F. P. Henderson



• *Recommended for Promotion When Due* in the December issue of the GAZETTE should rank well toward the top of your hit parade of provocative articles on subjects vital to the welfare of our Corps. It may eventually reach the number 2 position, right behind that all-time favorite, *Of Mortars and Men*. Promotion (with pay) is a subject near and dear to the hearts of all Marines. What's more, how well we promote has a direct relation to how well we fight.

Perhaps I should be disgruntled with the present promotion system. Here I am, already 40 and not yet a general as *Recommended for Promotion When Due* says I should be — if I'm worth keeping in the Corps at this patriarchal age. (To save reading time let me give the article the



short title — *RecPromDue*.) On the contrary, I am quite grunted with our promotion system. I feel it has treated me fairly and squarely. Thus, I am honor bound to defend it and state what I do not like about the proposed system. If that system represents progress and is inevitably to come, then let this be the requiem for something that was a part of the Old Corps' greatness.

For centuries, military, political, religious, business and social organizations have sought ways to insure that their best men were promoted and filled positions of responsibility. The myriad methods adopted have ranged all the way from selection by popular election in a democracy, to elimination by assassination or imprisonment in a despotism. While military organizations have sampled from both of these extremes in the past, they have generally followed a more conservative middle-of-the-road course. The system proposed in *RecPromDue* is not new. It has been tried many times in the past. It is still in use in military organizations, both foreign and domestic. Before considering what effect such a system might have in our Corps, let us see what results it has produced elsewhere in modern times.

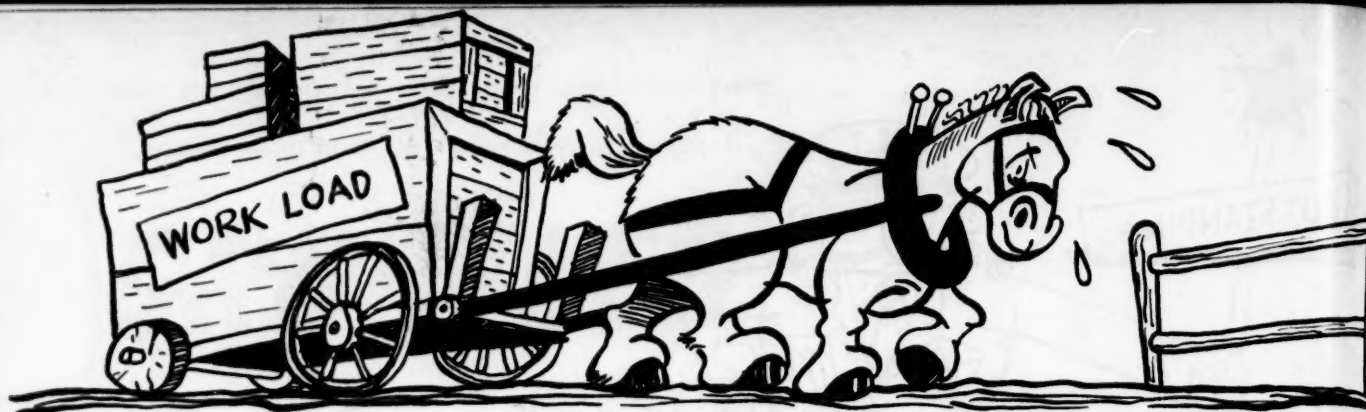
In World War II, the US Army and Army Air Force had blitz promotion systems designed to allow outstanding officers to be promoted

with great rapidity. (I am sure you recall all the old jokes about colonels under 21 years old not being allowed in officers' club bars unless accompanied by their parents and about the boy generals of the Air Force.) As you know, the Navy and Marine Corps stuck to the system of promotion by classes—when due. Here we had a once-in-a-lifetime opportunity to compare the wartime results produced by different promotion systems.

If the thesis advanced by *RecPromDue* has a solid foundation in fact, then the wartime performance of the Army and Army Air Force should have been manifestly superior to that of the Navy and Marine Corps. This superiority should have been widely evident at all levels of command, from the company to the field army, and in comparable air



L. PREUDHOMME



and naval commands. It should have been apparent in tactical, strategic and logistic planning. It should have been apparent on the battlefield and in air combat; in the operation and administration of our vast stateside and overseas training bases and supporting establishments and in the standards of morale and discipline prevalent in each of the Armed Forces.

I have yet to hear any responsible person, either military or civilian, claim that such a superiority existed. There is certainly nothing in the records of the combat accomplishments in World War II to support it. So on a basis of results produced in time of war—which is what we are after—our present system was not proven inferior to the proposed system. With commanders and staffs who were a mixture of average and outstanding officers, our promotion system produced results at least equal to a system whose commanders and staffs should have all been outstanding young officers.

*RecPromDue* presents possible advantages of the promotion system it proposed. To me it seems to possess one inherent evil which far outweighs all possible advantages. I believe it would irretrievably destroy the bond that links all Marine officers together as a "band of brothers," dedicated to keeping *their* Corps fit to discharge its heavy obligation to the nation. You probably read Hanson Baldwin's recent article *What's Wrong with the Regulars* in which he said that one of the principal ills of the Armed Forces today, a malady fortunately not become epidemic in our Corps, was the loss in their officer corps of this Nelsonian tradition of being truly a band of brothers. (And sisters too. Let's not forget the Women Marines!)

As individual Marine officers we still feel that we are closely identi-

fied with every other Marine officer—and enlisted Marine too. Whether ground or air, infantry, SDO, engineer or electronics, we all hold to strong common beliefs on discipline, training, tradition, esprit, progressiveness, duty and in our invincibility in battle. When the actions of one of us bring great credit to the Corps, we feel that some part of the glory shines on each of us. In difficult situations we draw strength from knowing that one Marine never lets another Marine down. This beneficial condition exists because the circumstances under which we live, work and fight are aimed at uniting us, not dividing us. There is nothing now in our Corps which would set the welfare of one group or category of officers above or in opposition to the welfare of other groups. Brother need not raise his hand against brother to obtain just rewards for his service to the Corps.

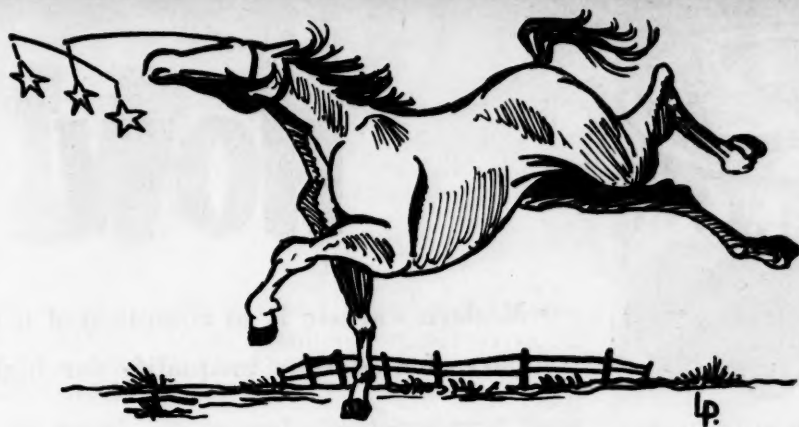
But the promotion system proposed in *RecPromDue* immediately divides us into two antagonistic classes—the privileged and the underprivileged. In the first class are the "outstanding officers." These are to be the super-Marines, the elite of the elite. (I hope they would still call the rest of us elite troops.) These are the thoroughbreds who race on with stars in their eyes to the cheers of somebody or other. (Surely not the "average" Marines.) According to *RecPromDue*, these officers "should be schooled, assigned and selected for rapid advancement." I presume this means they will get first call on the available quotas at MCS and other service schools and will monopolize the desirable command and staff billets in the FMF and elsewhere throughout the Corps. It will never be their lot to be assigned to one of the unsung, lowly jobs which you hope to avoid, but know that somebody has to do.

The underprivileged class is composed of the "below average" and "average" officers. We needn't worry here about the "below average" unfortunates because they are apparently going to get the bum's rush—pronto. But the "average" officer, and that is most of us, is going to become a second-class Marine. This will be something new in our Corps. He will have a pretty dim future as soon as he gets that "average" tag hung on him. He is going to be the old plow horse who labors from dawn till dark in dusty fields while the thoroughbreds prance in green pastures. He will work obediently under the direction of an "outstanding" officer so the latter can win another quick promotion. Such choice billets as Post Garbage Officer will be reserved for him. He may get to go to school if there are any seats left after the "outstanding" boys are all taken care of. He "will be considered for promotion in keeping with all other 'average' officers in his rank." (When due, I guess.) After 20 years service he will get a "Dear John" letter from the Commandant. Semper Fidelis is going to be a one-way proposition as far as he is concerned.

Such a sundering of our officer corps would be fatal to its present cohesiveness. At present we can all work loyally for the best interests of the Corps, wherever we may be assigned. We enjoy the comforting feeling that loyalty to the Corps and to brother officers is more important in the long haul than selfish devotion to self interest. But with the "average-outstanding" promotion system the law of the jungle will prevail and it is every man for himself.

When all newly commissioned lieutenants start striking for brigadier general by 40, getting on the "outstanding" list becomes more important than learning how to be-





come a good Marine officer. Getting all "outstanding" fitness reports takes precedence over loyalty to Corps and brother officers. When that happens our solidarity as a band of brothers vanishes. In its place we substitute life as lonely individuals in a fiercely competitive struggle for promotion. Life in such a Marine Corps does not appear to be a very pleasant prospect.

The objective of the *RecPromDue* promotion system is to enable selected officers to be promoted rapidly. The result is younger officers in grade than we are now accustomed to having. General officers by 40 was the goal set in the article. This policy infers that there is some special merit to being young, by present standards, for whatever grade you may be in. In riposte to this assumption I recommend you pull the 1947 volume of the *GAZETTE* from your bookshelf and turn to the July issue. The lead article, *Why the Accent on Youth?* is a splendid study of the complex and vital problem of age—intellectual capacity—fitness to command.

In his exploration of the many facets of this problem, the author (a pseudonymous Major Hale) places great emphasis on the importance in a higher commander of what he calls "one of the most priceless of all the intellectual qualities—judgment." Hale maintains that, "It is the capacity for judgment, which is the sum of intelligence and experience that enables the vigorous, mature mind to arrive at a more workable solution to a problem than the vigorous youthful mind." Webster defines judgment in part as, "the power of arriving at a wise decision or conclusion on the basis of indications or probabilities when the facts are not clearly ascertained." Surely this is one of the most vital characteristics desired in a combat commander,

eternally faced with the nagging necessity of making crucial decisions on partial or vague information of the enemy. One might sum up Hale's article by stating that there are reasonable grounds to conclude that a poplar is not a better tree than a sequoia just because it grows faster.

As an illuminating case history of the value of maturity and judgment in a commander at a critical point in our nation's history, look back 12 years to Guadalcanal—and Gen A. A. Vandegrift. When he was thrown into one of the most desperate struggles in modern warfare, Gen Vandegrift was 55 years old, had 33 years of widely varied service and had been a general officer for 2 years. Such a career is not a meteoric rise to youthful fame. Rather it is an orderly growth of a man to full wisdom and maturity—a man prepared to lead in a time of crisis.

Fletcher Pratt, in his book, *Eleven Generals* reveals how the Marine Corps produces such a commander (and we have produced many of them, from Belleau Wood to the Chosin Reservoir) and what the results are when the chips are down in battle. By including Gen Vandegrift in the book, Pratt, a discerning military historian, rightfully gives him a place among the Great Captains of all time. In the chapter, "Vandegrift of Guadalcanal" he portrays a commander resolute and inspiring in the face of endless discouragement, bold or cautious as necessary and with an alert and open mind. Pratt says that Gen Vandegrift's decision to 'throw away the book' on position defense and adopt a cordon defense around Henderson Field entitles him to be included in the select company of "genuine American military inventors." Maybe Gen Vandegrift would have been as good a commander at 44 years of age with 22 years of service

as he proved to be at 55 with 33 years of service. I like to think otherwise. It is reassuring to believe that in his many years of service he learned something from the Marine Corps to add to his own manifest talents. In *The Struggle for Guadalcanal*, Professor Morison, dean of naval historians, praises Vandegrift's conduct of the campaign and says of him that he, "—had learned the fighting trade in the hard Marine Corps School—" When Gen Vandegrift appeared before the Senate Armed Forces Committee in 1946 to testify in the unification hearings, he left no doubt that over the years the Marine Corps had worked its subtle magic on him to make him the victor of Guadalcanal. In closing his statement to the committee he said simply, "The bended knee is not a tradition of our Corps." His career fully supports Oliver Wendell Holmes' truism that, "Knowledge and timber should not be used until seasoned."

I hope that you will not construe from the preceding remarks that I am for suppressing outstanding officers and glorifying mediocre officers. Far from it. As Americans we fight and die for the precept that all men are created equal with respect to their rights to life, liberty and pursuit of happiness. But we also acknowledge that in respect to their individual capacities and abilities, some men are, in the words of George Orwell, "more equal than others."

There is always a place and a need in our Corps for outstanding officers. It has always had them in full measure and nurtured them well. An officer who has demonstrated to his fellow officers that he is truly outstanding has always had their respect and admiration. Wisely, we have not set him apart as a high caste Brahmin, remote from his fellows and subject to their resentment.

US ♣ MC



# HOW OLD

**Modern warfare is so complicated it takes the greater part of a lifetime to qualify for high-level command**

**By LtCol Frank O. Hough**

BACK IN 1948 WHEN THE LATE Gen Hoyt Vandenberg was appointed Air Force Chief of Staff, the *Washington Post* published an editorial commenting on what a fine thing it was to have so young a man heading one of our armed services. Somehow this struck a jarring note in one reader's mind and caused him to glance into the matter of how old is "old" in relation to top-flight military men in our own and other nations' history.

Actually, if Vandenberg had been serving during the crucial years of the American Revolution at the age of his appointment, he would have found himself in a dead heat for the distinction of being the oldest general officer on active duty: tied with Horatio Gates, whom the soldiers nicknamed "Granny." At 48 our distinguished airman was 5 years older than George Washington when the latter was appointed Commander-in-Chief of the Continental Army. Among Washington's key subordinates, Nathaniel Greene became a major general at 34 and conducted his brilliant southern campaign at 38. Henry Knox was given chief command of the Continental artillery at 27. And so on, scaling down to the ultimate in something or other when Lafayette was commissioned a major general at the tender age of 19—and he wasn't a bad one, either. Even Benedict Arnold, whom contemporary descriptions depict as a beat-up old warhorse—he was partially crippled from a wound sustained at Saratoga—was only 39 when he terminated an outstanding fighting career by turning traitor.

Definitely, the accent has been on youth throughout the past. Only a handful of the great captains of history were over 50 at the height of their careers, while a great many

more were under 40. Turning to ancient times, Alexander the Great had conquered all of the known world and dissipated himself to death at 33. Hannibal won the most complete victory in recorded history at Cannae when he was 31. Modern warfare is generally dated from Gustavus Adolphus, who won his first great victory at 30; his last, where he was killed in action, at 35. Frederick the Great rocketed to fame at 29, terminated his active fighting career at 51. Napoleon conducted his brilliant Italian campaign when he was 27, and went on from there. His ultimate opponent, Wellington, became a major general at age 32; both he and Bonaparte were 46 when they met at Waterloo.

But these figures serve only to point up the soundness of the old epigram: "All generalities are false, including this one." Julius Caesar first attained military fame at 57, Marlborough at 54, the same age as Robert E. Lee when he assumed chief command of the Confederacy. And the prime exception to prove all rules is provided by Turenne (Viscount Henri de la Tour d'Auvergne Turenne), Louis XIV's great Marshal of France, of whom Napoleon said, "He grew bolder as he grew older." Turenne had achieved a solid military reputation at 28, but he was killed in action at 64 to terminate the most brilliant and daring campaign of his long career.

But then again on the American side, after the 59-year old Hull and the 61-year old Dearborn made such a hash of the situation around Detroit during the War of 1812, the country was saved from disaster only when the sexagenarians were replaced by younger, more vigorous men.

The Army had a "new look" as the 1814 campaign opened. New major generals in order of rank were: George Izard, 37, commanding the Lake Champlain area; Jacob

Brown, 39, on the Niagara; Andrew Jackson, 46, in the south.

And suddenly, in vivid contrast to what had gone before, US conduct of the war began to make sense. What Andrew Jackson did at New Orleans is too well known to require more than mention here. At Plattsburg Izard's troops (though Izard was not present) stopped an overwhelming invasion force composed of veterans of Wellington's Peninsular War, with a decisive assist from Commodore McDonough's fleet on Lake Champlain.

At Chippewa, on the Canadian side of the Niagara, a brand new 28-year-old brigadier named Winfield Scott completely routed a British force equal to his own in numbers.

The career of this same Winfield Scott, the precocious young officer who rose from major to brevet major general in the War of 1812, serves to illustrate the different ways in which advancing years affect different individuals, both physically and mentally. Scott was a vigorous, hard-riding 61 when he conducted his brilliant Mexican campaign for which history knows him best: the age at which decrepit Henry Dearborn was fumbling around in a farm wagon before his complete debacle and capitulation at Detroit. But he was still commanding the Army at 75 when the Civil War broke out, weighed nearly 300 pounds and had gained the nickname "Old Fuss and Feathers." Impatient younger officers soon forced him into retirement.

In no war in anybody's history did young men rise to high command more quickly than in this War Between the States. This is not always immediately apparent in this clean-shaven area when you gaze at photographs of the fiercely whiskered or otherwise hirsutically adorned faces then in style. But it is a fact that only two commanding generals on the army level exceeded 50 years in



# IS OLD ?

age: the Confederacy's Lee and Joe Johnston, each 54. Corps commanders were mostly in their 30s or early 40s, while commanders of divisions and brigades ranged down to the mid-20s.

Lee had long been a marked man in the US Army and was Scott's choice for the chief Union field command when he made his painful decision to stick by his native state. He was at the peak of his mental powers at 54, and he surrounded himself with such top-flight lieutenants as Stonewall Jackson (37), Longstreet (40), Beauregard (43), Early (46) and Jeb Stuart (31).

On the Union side, McClellan was 35 when he maneuvered Old Fuss and Feathers into retirement and assumed command of the Army of the Potomac. He was succeeded in that post by Burnside (38), Hooker (48) and Meade (also 48 when he took over). Grant was commissioned a lieutenant general and appointed to chief command at age 42 and picked as his two key subordinates Sherman (44) and Sheridan (33).

Both sides produced their precocious youngsters. George A. Custer and Nelson A. Miles each commanded a Union corps at 25. And the Confederacy came up with "Fightin' Joe" Wheeler, who did the same for his people at 28 with rank of lieutenant general.

During the long period of military doldrums following the Civil War, promotions came slowly and everybody grew old in rank, so that the outbreak of the Spanish-American War found captains leading their companies into combat with long gray beards streaming in the breeze.

These age criteria cannot properly be applied to the Marine Corps for the reason that our officers have had no opportunity to exercise large-scale field command until recent years. But it might be interesting to glance at the ages at which some of our Commandants have served.

Major Samuel Nicholas held his

post as senior officer of the Continental Marines from age 31 to 37. William Ward Burrows, first Commandant of the Corps as it exists today, was appointed at 40, resigned at 46. His successor, Franklin Wharton, held office between ages 37 and 51. The great Archibald Henderson received his appointment at 37; he was 53 when he led virtually the whole Marine Corps in person against the Florida Indians (and received an Army brevet to brigadier) and he died in office in 1859 at the ripe age of 76.

Following establishment of statutory retirement age and subsequent limiting of the term of office, the age level has tended to standardize. Since the turn of the century, the youngest Commandant to be appointed was MajGen John A. Lejeune, at 53. Neither he nor all subsequent Commandants, however, have served to the required retirement age. Wendell C. Neville died in office after 16 months' service. General Alexander A. Vandegrift's four-year term came to an end when he was 61, General Clifton B. Cates' when he was 59. On the other hand, the age limit caught up with MajGen John H. Russell, Jr. (1934-'36) when he had served only half of the prescribed term.

As may be gathered, the foregoing statistics are generally indicative rather than adding up to anything specific. There is a saying that a woman is as old as she looks, a man as old as he feels, and nowhere does this apply more aptly than in the military profession.

Nor can age criteria of the past be applied justly to warfare as we know it today. Time was when the place of a commander up to corps level was at the head of his troops; when the only attributes needed were some grasp of the ageless principles of war, natural born leadership, personal courage and the ability to maneuver large masses of troops in close order under fire — general officers all too often died with their



boots on. It is a far cry indeed from an operation like Iwo Jima to the day when George Washington had to be restrained forcibly from leading a suicidal attack in person, and when Robert E. Lee's troops refused to carry out an assault order until their beloved commander withdrew from the danger zone. We had a fleeting revival of that sort of thing during the grim early days in Korea when, for lack of seasoned junior officers, at least two regimental commanders were killed in action leading reconnaissance patrols, and where a major general was taken prisoner far forward of where major generals are supposed to be.

Today, generalship has become to a great extent impersonal. Modern war is so complicated, with so many ramifications, that the time required to qualify for high level command takes the average man well into middle age. And by then, such a man has become too valuable an asset to risk his being killed unnecessarily.

Not that there are no modern examples of personal leadership at high level. At Okinawa, General Buckner went forward in person for a look-see — and died as a direct result. It was no fault of the late General Patton that he did not die in combat; he made it a matter of principle to have his men see him as far forward as possible. And our General Shepherd used to inspire his enlisted personnel and junior officers — and scare the daylights out of his senior officers — by turning up in the front lines with all stars showing (at Cape Gloucester, Guam and Okinawa).

Military matters having developed as they have, it appears improbable that our generation will witness the emergence of another Alexander, Hannibal, Frederick or Napoleon; improbable, but by no means impossible.

US MC



# BLUEPRINT FOR PUBLICATION



Here are the specifications—a good plan,  
a basic knowledge of English, average  
intelligence and a moderate desire to write

By  
Major Philip N. Pierce, USMC

☛ "YES, I'D LIKE TO WRITE, BUT..."

But nothing! The mere fact that you would like to write is the solution to 50 per cent of the problem. The other 50 per cent is purely a matter of employing a few fundamentals. Most of these fundamentals can be summed up under the heading of common sense.

The MARINE CORPS GAZETTE recently invested a considerable sum of money in promoting an essay contest. The objective of this contest was two-fold—to increase the number of manuscript submissions, and to encourage new writers. Magazine editors are constantly in search of new material and new writers. The GAZETTE is no exception.

The contest was moderately successful. But 5 will get you 10 that for every person who has submitted an entry, there are 10 others who have *almost* screwed up enough cour-

age to try it, but just never quite got around to it.

Almost everyone feels a distinct urge to try their hand at writing, at some time or other. Those who never make the attempt fail to do so for one primary reason: they are convinced that successful writers are a breed apart, born with a certain magical touch of genius. Nothing could be further from the truth.

The military man who hasn't at least a half dozen interesting yarns on the tip of his tongue has yet to be born. Perhaps it's only that uproarious sea story about Dumbrowski and the colonel. Again it may be the factual account of who invented the semi-automatic long bow. Whatever it may be, it is interesting to someone.

"Oh sure," we say. "I can spin a sea story as well as the next guy, but putting it down on paper—that's different!"

Perhaps it is, but not nearly as different, or difficult, as most people

are inclined to think. There can be little argument with the thesis that a writer must possess certain qualifications. Here they are: a basic knowledge of English, average intelligence and a moderate desire to write.

As for the existence of a mystic formula for successful writing, there's a formula all right. There is about as much mystery connected with it as there is with driving a jeep! The magical formula is composed of equal parts of everyday speaking English, a few basic facts, an average amount of honest work and a supply of patience. Of the 100,000 people in this country who make their living by writing, very few have any special talents. Most of them have patience. Before we finish our discussion we will see why patience is a distinct attribute.

So much for the uncontested generalities, let's get down to cases. The two most common forms of writing intended for publication are fiction and articles. Fiction writing is a highly skilled art which requires long study before it should be attempted. Articles, on the other hand, are relatively simple to write. Most military publications print articles exclusively. Let us, then, concentrate on the techniques involved in producing a successful military article. For our purposes a "successful" article is one for which some tight-fisted

editor will pay us in coin of the realm.

Military writing can be divided into two general categories, "semi-professional" writing and "professional" writing. "Semiprofessional" writing includes all nonfictional military writing aimed at the general public. This type of writing covers the entire scale, from post war anecdotes to the technical discussion of a military activity, written for non-military publications.

"Professional" writing is that which is written for military readers. It includes every subject, dealing with their profession, which would be of interest to military readers.

It therefore appears that the first step in attempting a piece for publication is the decision as to what kind of writing we want to do. Be it



"professional" or "semiprofessional," the steps involved in writing a manuscript are exactly the same.

The second step is to choose a subject. The prime consideration in choosing a subject is to select one with which we are entirely familiar. It generally requires only a few paragraphs for an average reader to tell whether or not the author knows what he is talking about. Another point to be kept in mind is the fact that articles are written with one, or a combination, of the following objectives in mind: to instruct, to inform, to entertain, to present an opinion. We must have one of these objectives in mind when we decide upon the subject of our article. As a final word on the business of subject choosing, it is well to remember that there is a limit to the profitable elaboration of the obvious. If we

do not have something new, or different, to offer we had best choose another subject.

In writing our article we must also keep in mind the audience we are trying to reach. Writing to meet the editorial requirements of specific publications is known as slanting. Since, basically, every periodical tends to specialize in their content, every manuscript should be slanted. Probably the most often used rejection phrase to appear under the letterhead of the MARINE CORPS GAZETTE is, "... interesting, but we regret that your piece does not meet our present editorial needs." This is a polite way of telling the author that his manuscript is not the type of thing that Marines would be interested in reading.

Producing a manuscript is very much like building a house. So far we have selected the kind of house we want (type of writing) and the specific model (the subject). Before we can begin construction, there are at least two more important requirements which must be met. We must obtain the materials with which we are going to build, and we must have a blueprint. A good builder never draws his final plan until he has assured himself that all the materials needed for construction are available.

One of the basic requisites of solid construction, of either a house or an article, is a good foundation. In order to build a foundation we have to dig. The digging must reach bed-rock to be of any lasting value. For our purposes this digging takes the form of research.

Facts concerning almost any given subject are available to anyone who cares to make the effort to dig them out. Someone once said, "A day in the public library makes anyone the second best authority in the world on any given subject."

Research is highly important to a successful piece of writing for a number of reasons. In the first place, the criterion for authorship in most periodicals is that the writer be qualified to speak authoritatively. He must instill in the reader the idea that he speaks from well founded knowledge. One of the surest giveaways of a writer who has failed to equip himself with facts is that old bugaboo, generalization. Generalization is one of the cardinal

sins of writing. It is also one of the quickest ways in the world to earn yourself a rejection slip. An editor can spot an unresearched article in a glance. He also knows that his readers can do the same thing.

For example, we must never be guilty of saying, "US forces attacked the garrison at Derne in the early part of the 19th Century." A quick look at a history book will provide us with the fact that the attack was made by US Marines in the early morning of 26 April 1805. The latter is an authoritative statement, backed by a recorded fact. The former is a generalization, a lazy, slipshod attempt to infer that there is factual information behind the statement.

There is another big reason why research plays such an important part in our construction. Very often our efforts will produce many new and interesting facts. This new information may well lead us to re-slant our piece much differently than we had originally intended. It may also produce enough additional information to provide sufficient material for a second article on the same general subject. It is a wise man who can dig a single foundation, then erect two houses upon it!

It would appear so far that we have done a considerable amount of work and still have a blank piece of paper staring at us from the type-



writer. True though this may be, we haven't time to worry about it. After all, writing the article is the easiest part!

We said that, in addition to the building materials required, we also needed a blueprint. Our blueprint



in this case is an outline. Wasted effort? Not on your life! Imagine what sort of a house we would have if we just grabbed a hammer and started nailing boards together.

Many beginning writers fail to realize that a solid outline is the backbone of nearly every good article. The strength, or weakness, of any piece is reflected in its basic plan. A piece which is not based on a comprehensive outline generally suffers from lack of logic and organization.

To properly construct an outline, we must go back to our reason for presenting the subject we have selected. Are we writing to inform, instruct, persuade, entertain or inspire? With our objective in mind, making an outline is fairly simple. The prime requisite of an outline is that it give a clear and logical picture of every *main* idea in our piece. It must also show how each separate idea (argument, opinion, fact, etc.) is related to the preceding ideas and to the general thesis of the article. With a good solid outline to work from, the writing of the piece becomes almost automatic.

Now that we have the material and the plan, let's dive into the article and see what we can do with it. Before we start, we need a few tools. About three will do—a typewriter, some paper and a dictionary. The paper should be white and of standard typewriting size. The dictionary is purely a matter of personal choice.

The first thing our article needs is an introduction. An introduction is generally divided into two parts—a narrative hook and the presentation of the specific subject of our article. The narrative hook is a legitimate trick by which we hope to catch the reader. The importance of the introduction can not be over-emphasized. This is the device by which we make our bid for audience attention in competition with all the other pieces in the same issue of the magazine. The hook must be strong enough to hold the reader's attention and draw him into the article. Writing a strong lead is merely applying one of the basic techniques of good salesmanship. If you can catch the customer's eye, a good product will sell itself. There is one warning which we must heed when we are writing an eye-catching lead. We must never promise the reader some-

thing and then fail to produce the goods. The hook must always be legitimate. We must, either in the body of the article, or in the conclusion, fulfill the promise of the lead.

Once we have written our introduction, the best way to write the remainder of the article is to plunge right ahead and write it without any further planning. Of course, we will be following our outline to insure that we get our ideas in the proper sequence. Sounds like a



pretty sloppy way to do the job we have so carefully planned, doesn't it?

Let's analyze this system a little. The first object in writing a piece is to get down on paper whatever we have to say. If we worry about correct grammar, sentence structure and style while we are trying to express our ideas, we'll never get anywhere. Very few of us can do more than one thing at a time. So, let's just write it the way we talk, follow our outline and proceed through the entire article as painlessly as possible. We'll worry about how it sounds later.

From the way we are going at this, it is apparent that we are going to have to rewrite our article before we have a finished product. If we can get away with rewriting it only once we may consider ourselves exceedingly fortunate! Most professional writers find it necessary to rewrite their pieces several times.

Our piece is now complete in the rough. The next task is to cut, tighten and polish it. Tightening and polishing cover a multitude of sins. It is in this process that we worry about the grammar, rhetoric and spelling which we didn't bother

with in the first draft.

In the first place, our piece is probably too long. Cutting then becomes the first order of the day. It takes many writers a few hundred words, or so, to get organized. They really don't start to say anything until the middle of page 3 or 4. A good trick in cutting a piece is to start reading along about page 3 and see if that isn't where we really started to say what we are driving at. If it is, let's throw away everything that comes before and start our article here. If we think we have a good lead, we can salvage that much of the beginning.

The next step is tightening and polishing. The first thing we'd better do is to count the adjectives and the verbs. We should have considerably less adjectives than verbs. Don't under estimate the imagination of the reader. It is seldom necessary to employ more than one adjective to modify a noun.

The next object of our scrutiny are the members of the verb *to be* family. Let's cut out about 75 per cent of the *ises*, *wases* and *weres*. In these place we will substitute active verbs. For example, "He was a fast swimmer," might come out "He swam rapidly." The more active verbs we can substitute for passive verbs, the more interesting our writing is going to be.

Another thing we must constantly be on the lookout for are those long sentences, made up of a series of clauses. They are annoying to the reader. A good thumb rule to follow is to limit our sentences to from 6 to 16 words.

While we are at it, let's look through our piece again and eliminate all those cliches and trite expressions. If we have heard them, so has everyone else. If we want clever expressions in our writing, we will have to think them up for ourselves.

So far we haven't mentioned the dictionary which we said was one of our necessary tools. This is probably as good a place as any to check our spelling. If there is any doubt about the spelling of a word it must be checked. The so-called "phonetic" spelling is out. Such things as *nite*, *thru*, etc. are merely combinations of letters and not the proper spelling of words. They are the products of certain columnists and magazines who, because they have nothing



worthwhile to say, must depend upon such "cute" tricks to attract readers.

As long as we are in this deep, we might as well kick the subject of punctuation around a little bit. Let's face it. Most people are scared to death of the problem of punctuation. For generations most English teachers have successfully conned the gullible public into believing that punctuation is a mysterious science. We have been taught that this black art is inflexibly governed by obscure and complicated laws. Poppycock! Punctuation is merely a mechanical means of assisting the reader to understand written words. Punctuation becomes difficult only when we try to remember the rules and their thousands of exceptions. If we learn to punctuate by logic and reason, and forget the rules, the problem becomes absurdly simple. Let's make up our own punctuation rule. One is all we need! "Never use a punctuation mark unless it makes the sentence more easily understood."



So far we have said nothing about style. Style, in this case, referring to mechanical style, not literary technique. Every publication has certain "house" rules governing the use of capitalization, numerals, typography and punctuation. About the only way for a free-lance author to determine the style requirements of a publication is to study several of its issues. The thing to keep in mind, however, is that style requirements are imposed for one reason alone — the elimination of inconsistency. It is extremely annoying to the reader to read a page of print and find 5 *Hand Grenades* in one place, five

*handgrenades* in another and *V handgrenades* in still another. About the only general rule we can apply to style is, be consistent.

At this stage of the game that first draft of ours is a pretty sorry looking mess as the result of our editing job. The only thing to do is attempt to decipher our editing hieroglyphics and rewrite the whole thing. After completing the job, the best thing to do is to throw the manuscript in a desk drawer, and forget about it for at least a couple of weeks. If we do this, it is surprising how much easier it is to look at our work objectively. We will also probably be quite surprised at how much we missed when we went over it the first time.

From time to time we have mentioned small tricks of the trade by which the amateur writer is most likely to give himself away. Probably the one thing by which editors most easily identify beginners from professionals is the improper mechanical preparation of a manuscript. Remember that we are trying to sell our goods in a highly competitive market. We went to considerable trouble to write an eye-catching lead, in the interests of good salesmanship. Another important technique of successful salesmanship is that of presenting goods to the consumer in a neat and attractive package. This also applies to our manuscript. Editors are busy people. They have neither the time, nor the inclination, to decipher messy manuscripts. It is, therefore, merely good business practice to prepare a manuscript in such a manner as to make it easy for the editor to read.

To begin with, we will use standard 8½ x 11, white bond typewriter paper. Our side margins should be 1½ inches on the left, and 1 inch on the right. These margins, together with double spacing all our copy, serve 2 purposes. They make for neat copy, and they allow sufficient space for any editorial notations which the editor may desire to make.

Starting at the top left edge of the paper, we skip 6 spaces and write our name and address flush against the left margin. If we are lucky enough to get paid for our work, we want the man to know where to send the check.

On the right side of the paper, on the same line as our name, we indicate the type of piece we have

written. Moving down 1 line, we indicate the approximate number of words contained in our manuscript. This information is provided in order that the editor will be able to tell at a glance what kind of a piece we have written and its approximate length.

Next we skip 12 spaces down the page and place the title of our piece in the exact center. Two spaces further down we type the word *by* (in lower case letters), also centered. Two spaces lower comes the big moment when we write our name at the head of our masterpiece.

Eight spaces down the paper from our by-line we start the first line of the piece. Normal paragraph indentation is 5 spaces. We should leave a bottom margin of 1 inch. It is not necessary to number the first page, but all succeeding pages should be numbered.

When we make the smooth copy we should always make at least 3 carbon copies. One carbon copy is for our files, to protect us against the loss of the original. The original and 2 copies go to the editor (the copies will help speed it through the Editorial Board and you'll get a decision on your labors sooner).

Manuscripts should always be mailed first class, and accompanied by a stamped, self-addressed, return envelope. Manuscripts of less than 6 pages should be folded twice. Those containing from 6 to 20 pages may be folded once and anything over 20 pages should be mailed flat.

Well, that's it! A brief prayer and into the mailbox with our masterpiece. From here on it's up to the Editorial Board, Fate and the US Postal Service. Good luck! US MC



# passing in review

BOOKS OF  
INTEREST TO  
OUR READERS

## Strongly Stated Views . . .

ADVANCE TO BARBARISM—F. J. P. Veale, with a foreword by the Very Reverend William Ralph Inge, Dean of St. Paul's. 305 pages, illustrated, index. Appleton, Wisconsin: C. C. Nelson Publishing Co. \$4.50

This is probably one of the most thought provoking books published since World War II. It is neither a tactical nor a strategic study.

Portions of the book deal with the war crimes trials, which the author vigorously condemns as a further instance of reversion to barbaric methods. Regardless of what one's opinion of the war-trials may be, Mr Veale's observation as to their future significance is worth noting:

"If defeat means liquidation of the leaders of the defeated nations, then these leaders can hardly be expected to withhold any means, however horrible and appalling, by which defeat may be avoided."

Mr Veale's work is a philosophic analysis of how WWII, in the author's opinion, destroyed the civilized restraints which the Western World, since the Age of Chivalry, had progressively imposed on the conduct of war.

As foundation for his case, Mr Veale, an English lawyer and historian, traces the history of warfare from the dawn of history to the end and aftermath of WWII. His basic conclusion stemming from this historical survey is that "civilized warfare"—the effort to wage war against military objectives, the willingness, if not the desire, to spare civilians and their cities—is the unique product of Christian Europe. By way of contrast, Mr Veale uses numerous examples of Asiatic warfare to substantiate his contention that the oriental military mind has waged a kind of war that makes little distinction between civilian and combatant forces.

This line of reasoning brings Mr Veale to the conclusion that, "It cannot be too strongly stressed that what

is called 'civilized warfare' is a European product and has never been practiced outside of Europe or in countries not under European influence."

"Civilized warfare" is most certainly an elusive term, but the author gives it substance and specific application by relating it to the code, emerging from European civil wars in the early 18th Century, by which European rulers tacitly agreed that their wars would be waged.

The basic principle of that code of civilized warfare was, "that hostilities between civilized peoples must be limited to the armed forces actually engaged."

From this the author proceeds to his condemnation of the Allied strategic bombing offensive against German population centers. His most pointed indictment of that portion of the war effort is contained in the chapter, "The Splendid Decision," referring to the term used by Mr J. M. Spaight, former principal Secretary of the British Air Ministry, in describing the British decision of 11 May 1940 which initiated the strategic bombing offensive.

It was this decision, in Mr Veale's opinion, that caused the "first deliberate breach of the fundamental rule of civilized warfare that hostilities must only be waged against the enemy combatant forces."

Mass bombing of population centers, the author holds, precipitated a decline in civilized warfare, with the resulting assumption that "barbarous methods must be inevitably ended in a barbarous defeat." As the war progressed, such a dire prospect resulted in the Germans taking the attitude that any act that remotely staved off defeat was justifiable.

*Advance to Barbarism* attracted much attention in England when first printed there in 1948. Publication of the book in this country will certainly not be greeted by unanimity of opinion as to its strongly stated

views. Yet, it should stir up thought and intellectual reappraisal of the events and conditions the author so vigorously deplores.

Reviewed by Col J. D. Hittle

## The Lone Wolf . . .

TITO — Vladimir Dedijer. New York: Simon and Schuster, 1953. \$5.00

The recent arrest and imprisonment by Yugoslavia's Marshal Tito of his own biographer brings a new topicality to *Tito* by Vladimir Dedijer, published in 1953. It is the exciting story of a remarkable man and a remarkable revolution, written by a devoted Communist.

Tito's revolution was especially noteworthy in that it was a double revolt, simultaneously conducted against the royal Yugoslavian government of King Peter and the conquering forces of Adolph Hitler.

But Tito's revolt was not a Moscow-directed project. Though Tito had been a lifelong Communist revolutionary, a participant in the Russian revolution and a member of the Comintern movement of the 1930s, he received no aid from Russia during his revolt. Tito actually received more aid from the Western governments, though they were late in realizing his worth. By and large, Tito's fight was fought entirely alone.

Marine Corps officers will be especially interested in Dedijer's description of the partisan warfare tactics employed so successfully by Tito against both the Germans and Mihailovic. Many will be surprised to learn that by the time of Italy's surrender in 1943, Tito's army of 300,000 partisans had liberated one half of Yugoslavia from the Nazis and the government-in-exile without substantial Allied aid.

Tito boasts that Yugoslavia's revolution does not devour its own children. But just a few years later Tito's own biographer is himself jailed for deviationist opinions.

Reviewed by 2dLt R. P. Stranahan

Marine Corps Gazette • April 1955



### Some Returned, But . . .

WE REMAINED — Col R. W. Volckmann, USA, 244 pages, maps, illustrated. New York: W. W. Norton & Co. \$3.75

The totality of modern war — embracing as it does not only actively engaged combat forces but also civilian populations in "rear areas" everywhere on the globe — has brought a new meaning to guerrilla warfare, a method of fighting as old as war itself. According to Col Russell W. Volckmann, himself an important guerrilla leader of World War II, "any future conflict . . . may well be regarded as an international civil war" in which resistance movements and guerrilla forces will "become potent tactical and strategical weapons of importance comparable to the new weapons of the atomic age."

In order to prepare for future wars, then, it is important to study past examples of guerrilla operations in the same manner as we examine and analyze all other forms of combat. Col Volckmann's account was written with the idea of presenting a case history of the activities of the Filipino guerrillas in northern Luzon. The story of how these brave men, under the inspired leadership of Americans like Volckmann, fought their own war against the Japanese invaders who had bespoiled and occupied their land, makes an interesting and informative account for the military reader.

The author begins his narrative by describing his activities as senior instructor and commander of a Filipino infantry regiment during the campaign which ended in the surrender of nearly 80,000 Filipinos and Americans on Bataan. How Volckmann escaped capture and how he and others made their tortuous way to the relative safety of the northern Luzon mountains is a story equally interesting. But the heart of the book, that portion which military readers will most wish to study, is the account of the formation and operations of the 5 infantry regiments comprising the United States Armed Forces in the Philippines, North Luzon, which Volckmann ultimately headed.

Unfortunately, the author's description of USAFIP, NL, activities leaves something to be desired. He tells in broad generalizations how the

guerrillas were organized, how they defended themselves, the difficulties of supply and communication and of their ultimate role in defeating the Japanese as a part of the US Sixth Army. But the book's value would have increased notably had Col Volckmann devoted more space to the recruitment and training of his troops, the development and details of guerrilla tactical doctrine, intelligence operations (which for a long time comprised the primary USAFIP, NL, mission), logistical problems and the question of morale. Better maps would also help.

*We Remained*, therefore, is valuable chiefly as an introduction to guerrilla operations and as a powerful plea for their acceptance as an important weapon in future wars. It is not quite the "lessons learned" study which the author set out to present and which his experience eminently qualified him to write.

Reviewed by Capt Stanley L. Falk

### Vest-pocket Biography . . .

NAPOLÉON (The Story of His Life) — John Hale. 212 pages, illustrated. London, England: Faber and Faber, 24 Russell Square. \$1.75

There have been many books written about Napoleon including biographies consisting of 9 volumes. John Hale, a British author, very successfully acquaints the reader with his subject in a relatively few thousand words by including a bare minimum of historical background. He describes only one battle in detail so that the reader can appreciate Napoleon's strategy in action. He illustrates Napoleon's great administrative abilities by referring to only a few of his thousands of dispatches and letters.

Hale describes how as Emperor, Napoleon the administrator brought order to chaotic France. Although for the time France's enemies were beaten, her internal problems remained. He restored government solvency, stimulated commerce and industry and standardized the laws. Everything was done with his usual efficiency and, "Men wore themselves out with work just as in battle they died for him."

In his preface, the author admits that it is not possible to write a useful book about both Napoleon and his times. However, he has presented a very fine introductory biography

which shows the reader who Napoleon was, what made him great and how he finally lost his power. I feel that any reader who has made an acquaintance with Napoleon from Mr Hale's book will want to read some of the more detailed literature that has been written about one of history's most able men.

Reviewed by Capt R. M. Erbland

### Stars in Your Skies . . .

DESIGN OF THE UNIVERSE — The Heavens and the Earth — Dr Fritz Kahn. 373 and x pages, index, profusely illustrated. New York: Crown Publishers Inc. \$5.00

This attractive volume opens with a discussion of the world of modern physics and in turn takes up the atom, the heavens and the earth. Ancient concepts are described and explained, and the transition between classic and modern scientific thought is treated in detail.

This book has been a distinct pleasure, both from its content and its format. Charts, diagrams and photographs are all used to illustrate points in the text—there are 150 of them, and they are better than anything of the kind I have ever seen.

In the matter of text, the book is a series of short, clear, interesting accounts of the development of the sciences of physics and astronomy and of the earth and its components. The language is simple and graphic, and the explanations are lucid. The section on astronomy — apparently the author's first love — will teach the non-professional more about that imaginative science than all the popular works written to date. It alone would be worth the price.

The fact is that this book is one to buy for one's own library. It would be a magnificent gift, especially to an intelligent and inquiring teenager.

Reviewed by LtCol J. L. Zimmerman

### New Small Arms Edition . . .

SMALL ARMS OF THE WORLD, 5th Edition — W. H. B. Smith. 768 pages. Harrisburg, Pa.: The Military Service Publishing Co. \$7.50

This new, revised and enlarged edition, with over 1,300 illustrations shows how to load, strip and operate all small arms of all nations of the world. Only with respect to Soviet weapons does the volume leave something to be desired. Here it is a bit incomplete.

US & MC



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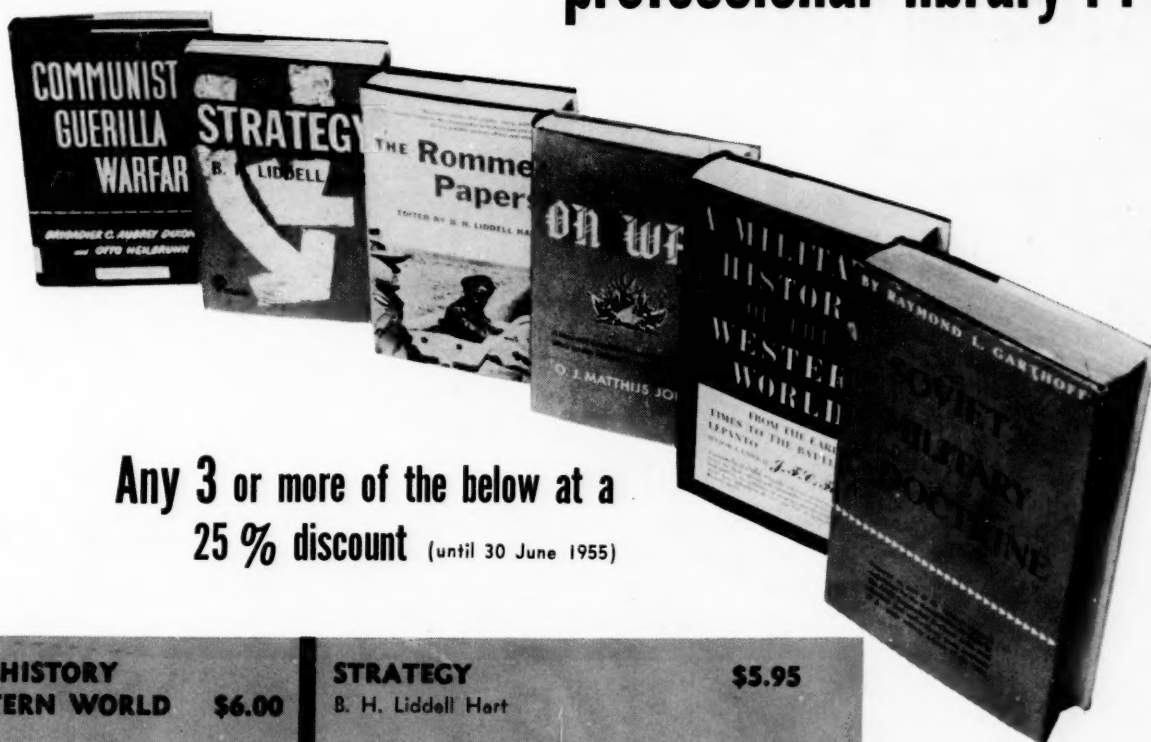
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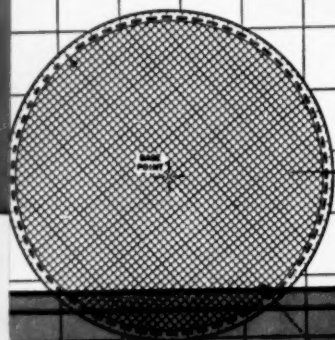
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